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A handwritten signature in blue ink, reading "Sia Lagos".

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Important Information

This Notice has been inserted as the first page of the document which has been accepted for electronic filing. It is now taken to be part of that document for the purposes of the proceeding in the Court and contains important information for all parties to that proceeding. It must be included in the document served on each of those parties.

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Form 59
Rule 29.02(1)

Supplementary Affidavit

No. VID1357 of 2025

Federal Court of Australia
District Registry: Victoria
Division: General

FRIENDS OF AUSTRALIAN ROCK ART INC

Applicant

MINISTER FOR THE ENVIRONMENT AND WATER AND ANOTHER

Respondents

Affidavit of: **David Burke**
Address: Level 15, 477 Collins Street, Melbourne VIC 3000
Occupation: Lawyer
Date: 27 April 2026

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Filed on behalf of (name & role of party) Astrid Puentes Riaño, *amicus curiae*
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[Version 3 form approved 02/05/2019]

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I, David Burke of Level 15, 477 Collins Street, Melbourne, Victoria, Lawyer, affirm:

1. I am a Partner at Lander & Rogers, lawyers for Astrid Puentes Riaño, in her capacity as United Nations Special Rapporteur on the human right to a clean, healthy and sustainable environment. I am authorised to make this affidavit on Ms Puentes Riaño's behalf.
2. I make this affidavit based on my own knowledge and belief in support of the submission of Astrid Puentes Riaño to be heard as amicus curiae dated 27 April 2026.

Disclaimer

3. The United Nations Special Rapporteur on the human right to a clean, healthy and sustainable environment, established pursuant to resolution 19/10 of the Human Rights Council, is part of "[t]he system of Special Procedures" that "is a central element of the United Nations human rights machinery and covers all human rights: civil, cultural, economic, political, and social."¹ They serve as an independent human rights expert selected for their "(a) expertise; (b) experience in the field of the mandate; (c) independence; (d) impartiality; (e) personal integrity; and (f) objectivity." They "undertake to uphold independence, efficiency, competence and integrity through probity, impartiality, honesty and good faith" and "not receive financial remuneration."²
4. Astrid Puentes Riaño was appointed by the Human Rights Council as the United Nations Special Rapporteur on the human right to a clean, healthy and sustainable environment, pursuant to HRC resolution 55/2 on 5 April 2024, to start her mandate on 1 May 2024 and is expected to serve until 30 June 2027.
5. In the performance of her mandate, the Special Rapporteur has the legal status of an expert on mission for the United Nations, within the meaning of Articles VI and VII of the Convention on the Privileges and Immunities of the United Nations, adopted by the United

¹ Office of the High Commissioner for Human Rights ("OHCHR"), *Special Procedures of the Human Rights Council*, <https://www.ohchr.org/en/hrbodies/sp/pages/introduction.aspx>

² OHCHR, *Special Procedures of the Human Rights Council*.

David Burke

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Nations General Assembly on 13 February 1946. In accordance with Article VI, Section 22 of the Convention, as an expert on mission for the United Nations, the Special Rapporteur enjoys such privileges and immunities as are necessary for the independent exercise of her functions, including immunity from legal process of every kind in respect of words spoken or written and acts done by her in the course of the performance of her mission.

6. This application is submitted voluntarily without prejudice to, and should not be considered as a waiver, express or implied, of the privileges and immunities of the United Nations, its officials and experts on mission, pursuant to the 1946 Convention on the Privileges and Immunities of the United Nations.
7. The Special Rapporteur further clarifies that authorisation for the position and views expressed in the materials filed in the proceedings, in full accordance with the independence afforded to her mandate, was neither sought nor given by the United Nations, the United Nations Human Rights Council, the Office of the United Nations High Commissioner for Human Rights, or any of the officials associated with those bodies.
8. Based on my review of previous applications by Ms Puentes Riaño and her predecessors to be heard in court proceedings, I understand that it is the practice of the United Nations and its constituent bodies not to require, and the practice of Special Rapporteurs not to seek, authorisation for the position or views of a Special Rapporteur, whether in court proceedings or otherwise.

Submission of Ms Puentes Riaño

9. If granted leave to be heard as amicus curiae, Ms Puentes Riaño proposes to rely on the written submissions annexed at **DB-6**. Counsel for Ms Puentes Riaño would be in a position to address these orally at the final hearings of the proceedings if any grant of leave extended to oral submissions.

Ms Puentes Riaño's further work to date as Special Rapporteur on the right to a healthy environment since my first affidavit sworn on 13 November 2025

10. In her official capacity, Ms Puentes Riaño, along with other UN Human Rights Experts, issued a statement on civic participation at the Climate COP30. A copy of that statement is annexed at **DB-7**.
11. In her official capacity, Ms Puentes Riaño edited report A/HRC/61/47: Priority actions towards breathing clean air, protecting public health and ensuring a healthy




environment, which was published on 12 January 2026 and delivered to the Human Rights Council of the United Nations. A copy of that report is annexed at **DB-8**.

12. In her official capacity, Ms Puentes Riaño also prepared report A/HRC/61/47/Add.1: Visit to Singapore which was published on 12 January 2026 and delivered to the Human Rights Council of the United Nations. A copy of that report is annexed at **DB-9**.
13. In her official capacity, Ms Puentes Riaño prepared an End of Mission Statement at the conclusion of the country visit to Ireland dated 20 February 2026. A copy of that statement is annexed at **DB-10**.
14. In her official capacity, Ms Puentes Riaño intervened in Application No. 001/2025 in the African Court of Human and People's Rights in Arusha, United Republic of Tanzania, in the matter of a Request by the Pan African Lawyers Union for an Advisory Opinion on the of [sic] States with Respect to the Climate Crisis. This submission addressed, inter alia, the application of custom and treaty law concerning state obligations on climate change, state obligations to generations affected by climate change, the obligations of states to protect vulnerable populations, and the responsibilities of African states regarding violations by third parties operating within their jurisdiction. A copy of that submission is annexed at **DB-11**.

Affirmed by the deponent
at Melbourne
in Victoria
on 27 April 2026
Before me:

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)
)
)
)



Signature of deponent

David Burke
Lawyer for Ms Puentes Riaño



Signature of witness

Claire Francis Rankin

An Australian Legal Practitioner within the
meaning of the Legal Profession Uniform
Law (Victoria)

A person authorised under section 19(1) of the **Oaths and Affirmations Act 2018** (Vic) to take an affidavit.

In accordance with section 27(1A) of the Oaths and Affirmations Act 2018, this affidavit was signed and affirmed by the deponent by audio visual link and the authorised affidavit taker has used a scanned or electronic copy of the affidavit and not the original in completing the jurat requirements.




Certificate of Annexure

No. VID1357 of 2025

Federal Court of Australia

District Registry: Victoria

Division: General

FRIENDS OF AUSTRALIAN ROCK ART INC

Applicant

MINISTER FOR THE ENVIRONMENT AND WATER AND ANOTHER

Respondents

This is the annexure marked **DB-6** produced and shown to David Burke at the time of affirmng his affidavit on 27 April 2026.



Claire Francis Rankin

Level 15, 477 Collins Street Melbourne VIC 3000

An Australian Legal Practitioner within the meaning of the Legal Profession Uniform Law (Victoria)

Filed on behalf of (name & role of party) Astrid Puentes Riaño, *amicus curiae*

Prepared by (name of person/lawyer) David Burke

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**IN THE FEDERAL COURT OF AUSTRALIA
DISTRICT REGISTRY: VICTORIA
DIVISION: GENERAL**

NO. VID 1356/2025
VID 1357/2025
VID 1400/2025

Australian Conservation Foundation Inc

Applicant in VID 1356/2025 & 1400/2025

Friends of Australian Rock Art Inc

Applicant in VID 1357/2025

and

Minister for Environment and Water

First Respondent in all matters

Woodside Energy Ltd

Second Respondent in all matters

PROPOSED SUBMISSIONS OF *AMICUS CURIAE*

- 1 If granted leave to be heard as *amicus curiae*, Astrid Puentes Riaño – in her capacity as United Nations **Special Rapporteur** on the human right to a clean, healthy and sustainable environment – seeks to make the following written submissions in these proceedings.
- 2 By way of summary, the Special Rapporteur’s submissions are directed to two issues arising under the grounds of review.
 - a) *First*, the correct construction of the phrase ‘substantial cause’ in s 527E(1)(b) of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**), which is the provision that determines whether the physical effects of climate change are an ‘impact’ of the North West Shelf Project (**NWSx**) (relating to Ground 1 in VID1400/2025 and Ground 4 in VID1356/2025).
 - b) *Second*, the content of the obligation in s 137A of the EPBC Act not to act inconsistently with the National Heritage management principles – specifically, what the obligation to protect and transmit heritage values ‘to all generations’ requires where climate change poses an acknowledged, serious, and irreversible threat to those values over a 45-year approval period (relating to Ground 6 and separate question on Ground 7 in VID1357/2025).

The submissions also briefly address the power to attach conditions necessary or convenient for protecting, repairing or mitigating damage under s 134(1) of the EPBC Act.

- 3 In line with her expertise, the Special Rapporteur's submissions identify the international law obligations relevant to constructional questions raised by the above two issues, and explain how those obligations inform the construction of the relevant statutory terms. The Special Rapporteur's intervention is made in a legal context that now includes the International Court of Justice's landmark Advisory Opinion on the Obligations of States in Respect of Climate Change of 23 July 2025 (**ICJ Advisory Opinion**), which clarified the pre-existing obligations of States under international law that are relevant to climate change. These proceedings provide an early opportunity for an Australian court to consider the construction of the EPBC Act's causal and protective provisions in light of that recently clarified legal background.
- 4 To provide the foundation for the Special Rapporteur's submissions, it is necessary first: to address the principle that statutes should be interpreted consistently with international law; to explain the salience of that principle in the particular context of the EPBC Act as it was in force at the time of the decisions under review; and to identify obligations under international law relevant to the interpretation of the EPBC Act in these proceedings.

PRINCIPLE OF CONSISTENCY WITH INTERNATIONAL LAW

- 5 A statute is to be construed, as far as its language permits, so that it is in conformity, and not in conflict, with established rules of international law.¹ This principle flows from the proposition that 'Parliament, prima facie, intends to give effect to Australia's obligations under international law.'²
- 6 The legal value of compliance with international law has two dimensions. *First*, ratification of a treaty involves an 'undertaking by the Executive government to adhere (in good faith) to the terms of a given international instrument as a solemn assurance

¹ *Jumbunna Coal Mine NL v Victorian Coal Miners' Association* (1908) 6 CLR 309, 363 (O'Connor J), referring to *Grenada County Supervisors v Brogden* (1884) 112 US 261, 269; *Polites v The Commonwealth* (1945) 70 CLR 60, 68–69 (Latham CJ), 77 (Dixon J), (80–81 (Williams J); *Chu Kheng Lim v Minister for Immigration* (1992) 176 CLR 1, 38 (Brennan, Deane and Dawson JJ); *Kartinyeri v The Commonwealth* (1998) 195 CLR 337, [97] (Gummow and Hayne JJ).

² *Minister for Immigration and Ethnic Affairs v Teoh* (1995) 183 CLR 273, 287 (Mason CJ and Deane J), 315 (McHugh J).

made to the international community and to the Australian people.’³ *Second*, ‘[t]he violation of an international treaty or custom is a violation of international law *qua* law’ and as such can be considered a ‘matter of deep and lasting significance.’⁴

- 7 Regardless of whether Parliament was aware of the relevant rules of international law when enacting a particular statute,⁵ the principle continues to apply because, like the principle of legality to which it has been compared,⁶ it is not understood as a ‘factual prediction’ about actual legislative intent,⁷ but rather as ‘an expression of a legal value, respected by the courts, and acknowledged by the courts to be respected by Parliament.’⁸
- 8 The principle is not absolute; as is the case with other interpretative presumptions, it may be rebutted if regard to ‘the circumstances and the subject matter’ make it ‘artificial and unreal’ to apply it.⁹
- 9 It is possible to identify a limit on the principle’s application by reference to when it is engaged. So, for example, it has been said that the principle is only engaged where the meaning of a statute is otherwise ambiguous. However, the conception of ambiguity is a broad one,¹⁰ such that the principle applies ‘as far as [the statute’s] language permits.’¹¹ Stated in the negative, ‘the implication must give way where the words of the statute are inconsistent with the implication.’¹²
- 10 Whether the principle permits resort to international law obligations that post-date the enactment of a statute has been doubted.¹³ However, this supposed limit rests on the mistaken idea that a court interpreting a statute is bound to give effect to what the enacting legislature intended *at the time of enactment*. It is now accepted that the Court’s task is subtly but importantly different – it is to give effect to the meaning of the statute

³ *Acting Minister for Immigration, Citizenship, Migrant Services and Multicultural Affairs v CWY20* (2021) 288 FCR 565, [3] (Allsop CJ); *Teoh*, 287 (Mason CJ and Deane J).

⁴ *CWY20*, [5] (Allsop CJ).

⁵ In this regard, see *Al-Kateb v Godwin* (2004) 219 CLR 562, [65] (McHugh J).

⁶ *Tajjour v New South Wales* (2014) 254 CLR 508, [48] (French CJ).

⁷ Cf *Al-Kateb*, [63]-[65] (McHugh J).

⁸ *Al-Kateb*, [20] (Gleeson CJ).

⁹ See, eg, *Polites*, 78 (Dixon J).

¹⁰ *Teoh*, 287 (Mason CJ and Deane J): ‘there are strong reasons for rejecting a narrow conception of ambiguity’.

¹¹ *Teoh*, 287 (Mason CJ and Deane J).

¹² *Al-Kateb*, [63] (McHugh J).

¹³ *Kruger v The Commonwealth* (1997) 190 CLR 1, 71 (Dawson J): ‘Such a construction is not, however, required by the presumption where the obligations arise only under a treaty and the legislation in question was enacted before the treaty ...’. See also *Coleman v Power* (2004) 220 CLR 1, [19] (Gleeson CJ); *McGee v Gilchrist-Humphrey* (2005) 92 SASR 100, [78] (Perry J). Cf *Re Maritime Union of Australia*; *Ex parte CSL Pacific Shipping Inc* (2003) 214 CLR 397, [46]-[48] (the Court).

at the present time.¹⁴ That is consistent with the ‘always speaking’ approach to statutory interpretation.¹⁵ Accordingly, although it is accepted that ‘[t]he matter cannot be regarded as settled,’¹⁶ the better view is that international obligations that post-date a statute’s enactment may inform its meaning.¹⁷ The case for the relevance of post-enactment international obligations is stronger in respect of customary international law, given Parliament’s presumed understanding that these obligations are capable of developing over time.¹⁸

- 11 While the principle operates generally – because the ‘values and principles [of customary and conventional international law] form part of the context in which statutes are enacted’¹⁹ – it has particular purchase when applied to an act that ‘seeks to give effect to matters of international law.’²⁰ As is explained below, the EPBC Act is such a statute.
- 12 The principle converges with the purposive approach to statutory interpretation mandated by s 15AA of the *Acts Interpretation Act 1901* (Cth). Where Parliament has enacted a statute to facilitate compliance with Australia’s international obligations, the Court should adopt the construction that best advances that purpose.²¹ In such a case it may not be necessary to prefer a particular interpretation (interpretation A) to show that another interpretation (interpretation B) would result in inconsistency with Australia’s obligations under international law. Rather, it may be enough that the former interpretation better advances the fulfilment of those obligations.

INTERNATIONAL LAW CONTEXT TO THE EPBC ACT

- 13 The constitutional basis for Commonwealth environmental legislation was established in *Commonwealth v Tasmania* (1983) 158 CLR 1 (*Tasmanian Dam case*). The High Court held, by majority, that the external affairs power in s 51(xxix) of the Australian Constitution empowers the Parliament to enact legislation implementing Australia’s

¹⁴ See generally Stephen Gageler, ‘Common Law Statutes and Judicial Legislation: Statutory Interpretation as a Common Law Process’ (2011) 37(2) *Monash University Law Review* 1.

¹⁵ See generally *Aubrey v The Queen* (2017) 260 CLR 305.

¹⁶ D C Pearce, *Statutory Interpretation in Australia* (10th ed, 2024) [3.74].

¹⁷ *Coleman*, [247] (Kirby J). See also *Ahmad v Inner London Education Authority* [1978] QB 36, 48; [1978] 1 All ER 574, 583 (Scarman LJ).

¹⁸ Cf Hon John Basten, ‘Australia’s Climate Change Legal Obligations’ (December 2025) p 18-19.

¹⁹ *R v Hape* [2007] 2 SCR 292, [53] (McLachlin CJ, LeBel, Deschamps, Fish and Charron JJ).

²⁰ *Kingdom of Spain v Infrastructure Services Luxembourg Sarl* (2023) 275 CLR 292, [16] (the Court); *R v Jacobs Group (Australia) Pty Ltd* (2023) 280 CLR 170, [22] (Kiefel CJ, Gageler, Gordon, Steward, Gleeson and Jagot JJ).

²¹ *Minister for Immigration and Border Protection v SZTAL* (2017) 262 CLR 362, [39], [44] (Gageler J, dissenting in the result).

obligations under international treaties even where the legislation operates principally within Australia. The case concerned Commonwealth legislation enacted to prevent Tasmania from damming the Franklin River, which would have damaged World Heritage values of the South West Tasmania wilderness. The High Court upheld that legislation as a valid exercise of the external affairs power.

- 14 Following the foundation laid by the *Tasmanian Dam case*, the EPBC Act was enacted to implement into Australian law the provisions of international environmental agreements to which Australia is party, including the *Convention on Biological Diversity*,²² the *Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)*,²³ the *Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention)*,²⁴ and the *Convention on the Conservation of Migratory Species of Wild Animals and related bilateral migratory bird agreements (CMS)*.²⁵ It has been said of the Act that it represents ‘an attempt to consolidate and clarify the Commonwealth’s responsibilities for environmental protection within the Australian Federation.’²⁶
- 15 The EPBC Act expressly refers to its international law context, including in the following ways:
 - a) The objects of the EPBC Act include ‘to assist in the co-operative implementation of Australia’s international environmental responsibilities’ (s 1(e)).²⁷
 - b) Many of the Act’s ‘matters of environmental significance’, found in Part 3, implement the protection obligations placed on Australia by international treaties.
 - c) The EPBC Act specifically requires the Minister to act consistently with certain international conventions. For example, in deciding whether to approve an action under ss 12 or 15A, the Minister must not act inconsistently with Australia’s

²² *Convention on Biological Diversity*, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993).

²³ Adopted by the General Conference at its seventeenth session Paris, 16 November 1972.

²⁴ *Convention on Wetlands of International Importance Especially as Waterfowl Habitat*, opened for signature 2 February 1971, 996 UNTS 245 (entered into force 21 December 1975).

²⁵ *Convention on the Conservation of Migratory Species of Wild Animals*, opened for signature 23 June 1979, 1651 UNTS 333 (entered into force 1 November 1983).

²⁶ *Minister for the Environment and Heritage v Queensland Conservation Council Inc* (2004) 139 FCR 24, [2], citing Second Reading Speech, House of Representatives Hansard, 29 June 1999 at 7770.

²⁷ The objects of the Act have previously informed the Court’s interpretation of it: see *Lansen v Minister for Environment and Heritage* (2008) 174 FCR 14, [284], cf [285].

obligations under the World Heritage Convention (s 137); equivalent obligations apply in respect of the Ramsar Convention (s 138) and migratory species agreements including the CMS (s 140). The Court has interpreted these provisions by reference to the corresponding international instruments.²⁸

AUSTRALIA'S OBLIGATIONS UNDER INTERNATIONAL LAW

- 16 Australia's international environmental obligations arise from a range of sources, including treaties to which Australia is a party, customary international law, and general principles of international law. The ICJ Advisory Opinion recently and authoritatively clarified the content of States' obligations under international law relating to climate change. The Annexure to these submissions summarises the climate change-related international law obligations identified by the ICJ. The Special Rapporteur does not seek to provide an exhaustive account of Australia's international environmental, human rights and climate-related obligations; her submissions are directed to those obligations that bear directly on the grounds of review in these proceedings.
- 17 Australia has conventional and customary obligations under international law to protect the environment and the climate system from significant harm. Under customary international law, Australia is subject to a duty to prevent significant harm to the environment. The ICJ Advisory Opinion confirmed that this duty applies to the environment and the climate system. This is an *erga omnes* obligation (a fundamental norm protecting shared interests), owed by States to the international community as a whole. The ICJ clarified that the climate system 'is an integral and vitally important part of the environment and which must be protected for present and future generations.'²⁹ It further confirmed that due diligence requires States to assess the specific climate-related effects of significant individual greenhouse gas-emitting activities at the project level, including their possible cumulative and downstream effects.³⁰ Further, the ICJ said that failure by a State 'to take appropriate action to protect the climate system from GHG emissions - including through fossil fuel production, fossil fuel consumption, the granting of fossil fuel exploration licences or the provision of fossil fuel subsidies - may constitute

²⁸ See, eg, *Booth v Bosworth* (2001) 114 FCR 39, [105] (Branson J); *Brown v Forestry Tasmania (No 4)* (2006) 157 FCR 1, [295]-[301] (Marshall J).

²⁹ ICJ Advisory Opinion, [273].

³⁰ ICJ Advisory Opinion, [137]-[138], [295]-[298].

an internationally wrongful act which is attributable to that State.’³¹ The standard of due diligence required is stringent in the climate context in light of the gravity of the risks to the environment and to human rights.³² States are required to ‘prevent significant harm to the climate system and other parts of the environment’,³³ which means using ‘all the means at [their] disposal’³⁴ to prevent the harm as well as, at a general level, putting in place legislation, administrative procedures, and enforcement mechanisms to regulate the activities of both public and private operators.³⁵ In making a determination concerning ‘significant harm’, States are to ‘take into account the best available science’, which the ICJ stated are (at the present time) the Intergovernmental Panel on Climate Change (IPCC) reports.³⁶

- 18 The precautionary principle is an integral part of the general obligation of due diligence under customary international law. The precautionary principle is embodied in principle 15 of the Rio Declaration on Environment and Development and several climate and environmental international agreements (including the *Convention on Biological Diversity*), and provides that ‘where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.’³⁷ In this regard, in discussing the importance of the precautionary principle (or ‘precautionary approach’) in this context, the ICJ agreed with the International Tribunal for the Law of the Sea that ‘where there are plausible indications of potential risks’, a State ‘would not meet’ its due diligence obligations ‘if it disregarded those risks.’³⁸
- 19 Customary international law also recognises intergenerational equity as an operative principle – that ‘present generations are trustees of humanity tasked with preserving dignified living conditions and transmitting them to future generations.’³⁹ The ICJ

³¹ ICJ Advisory Opinion, [427].

³² ICJ Advisory Opinion, [138], [372]-[386].

³³ ICJ Advisory Opinion, [132]-[139], [409].

³⁴ ICJ Advisory Opinion, [272]-[273], [281], [290].

³⁵ ICJ Advisory Opinion, [281]-[282].

³⁶ ICJ Advisory Opinion, [278].

³⁷ As described in the ICJ Advisory Opinion, [293].

³⁸ ICJ Advisory Opinion, [293]-[294].

³⁹ ICJ Advisory Opinion, [156] (see also [155]-[157]).

confirmed this principle must be taken into account ‘where States contemplate, decide on and implement policies and measures.’⁴⁰

- 20 Australia is a party to the United Nations Framework Convention on Climate Change (UNFCCC),⁴¹ and to the Paris Agreement⁴² which sits under it. Although the EPBC Act was not enacted to implement those treaties directly, they form part of the contemporary international law context in which the EPBC Act operates. Climate change is now recognised as one of the most significant and pervasive threats to many elements of the environment that are protected, including heritage places: the IPCC has concluded that climate change is already affecting the environment and the climate system, including cultural heritage through increased exposure to extreme weather events, rising temperatures and changing atmospheric conditions, with impacts that will intensify with every increment of global warming.⁴³
- 21 Article 3(1) of the UNFCCC requires parties to protect the climate system ‘for the benefit of present and future generations of humankind,’ thus referencing the principle of intergenerational equity. The Paris Agreement’s preamble also affirms intergenerational equity as a principle that parties must respect when taking action to address climate change, as well as emphasising the need for States to respect their human rights obligations when taking action to address climate change.⁴⁴
- 22 The Special Rapporteur’s mandate is important to these proceedings. The ICJ confirmed that the full enjoyment of human rights cannot be ensured without protection of the climate system.⁴⁵ In this regard, the ICJ considered that the ‘enjoyment of certain human rights’ may be ‘significantly’ impaired by the ‘adverse effects of climate change.’⁴⁶ The ICJ also confirmed that the right to a clean, healthy and sustainable environment is a human right, and that it is a precondition and essential for the enjoyment of other human

⁴⁰ ICJ Advisory Opinion, [157].

⁴¹ UNFCCC: *United Nations Framework Convention on Climate Change*, opened for signature 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994).

⁴² *Paris Agreement*, opened for signature 22 April 2016, [2016] ATS 24 (entered into force 4 November 2016).

⁴³ IPCC, *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 (2023); IPCC, *Climate Change 2022: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor et al. (eds.)], Cambridge University Press, Cambridge (2022), Chapter 1 (Point of Departure and Key Concepts) and Technical Summary.

⁴⁴ See, Paris Agreement, Preamble; ICJ Advisory Opinion at [404].

⁴⁵ ICJ Advisory Opinion, [373]-[375] and [403]-[404].

⁴⁶ ICJ Advisory Opinion, [376].

rights.⁴⁷ The recognition of this right corresponds to Australia's obligations to prevent significant harm to the environment and to the climate system as well as ensuring compliance with its international climate change obligations. In consequence, Australia, like other States, must take effective and progressive measures for the protection of the environment and the climate system, abstaining from implementing regressive measures.⁴⁸ Further, components of the right to a clean, healthy and sustainable environment are protected under the principles of ecologically sustainable development (such as, intergenerational equity), which must be taken into account by the Minister pursuant to s 136(2)(a) of the EPBC Act when deciding whether to approve the taking of an action.

SPECIAL RAPPORTEUR'S SUBMISSIONS ON GROUNDS OF REVIEW

- 23 Against the above background, the Special Rapporteur seeks to make submissions in relation to two issues:
 - a) The proper construction of 'substantial cause' in s 527E(1)(b) of the EPBC Act, as applied by the Minister in the Approval Decision and the Reconsideration Decision (Ground 4 in VID1356/2025 and Ground 1 in VID1400/2025); and
 - b) The content of the obligation in s 137A(a) of the EPBC Act not to act inconsistently with the National Heritage management principles, and what consistency with those principles requires in the context of climate change (Grounds 6 and 7 in VID1357/2025).
- 24 The Special Rapporteur also seeks to make brief submissions directed to the adequacy of the conditions attached to the Approval Decision (Ground 3 in VID1356/2025; Grounds 3, 4 and 5 in VID1357/2025), as they relate to each of the above issues.
- 25 The Special Rapporteur does not raise additional grounds or errors. Her submissions advance a positive construction of s 527E(1)(b) that resolves in a principled way the question left open by the Full Court in *Environment Council of Central Queensland Inc v Minister for the Environment and Water* [2024] FCAFC 56 (**ECOCQ**). Her submissions on s 137A identify the international law content of the National Heritage management principles that the Court needs in order to assess consistency with those principles. In

⁴⁷ ICJ Advisory Opinion, [393]; and see [387].

⁴⁸ As to the consequences of breach, see ICJ Advisory Opinion, [445].

both respects, the Special Rapporteur's submissions advance a perspective on the international law dimensions that supplements, without repeating, the submissions of the Applicants.

Section 527E(1)(b) and 'substantial cause' – Ground 1 in VID1400/2025 and Ground 4 in VID1356/2025

- 26 Ground 1 of VID1400/2025 and Ground 4 of VID1356/2025 raise the meaning of 'substantial cause' in the 'indirect consequence' limb of the definition of 'impact' in s 527E(1)(b). In particular, the grounds rest on the contention that the phrase 'substantial cause' 'has a qualitative meaning that cannot be reduced to arithmetical analysis.'⁴⁹
- 27 In making the approval and reconsideration decisions that are the subject of each of these proceedings, the Minister accepted that:
- a) climate change has physical effects on matters of national environmental significance, including the national heritage values of the Dampier Archipelago;
 - b) the combustion of fossil fuels contributes to climate change; and
 - c) the physical effects of climate change on those MNES are, if anything, indirect consequences of the NWSx Project.

What he disputed, and where the ACF in turn disputes his reasoning, is whether the NWSx Project is a substantial cause of those physical effects on the national heritage values of the Dampier Archipelago specifically.

- 28 Accordingly, a critical question to the proceedings is whether the phrase 'substantial cause' permits the Minister to dismiss the causal connection between the NWSx project's emissions and the physical effects of climate change on arithmetical grounds (very small proportion of global emissions; no net increase by substitution), or whether it requires a qualitative evaluative judgment about the nature and character of the causal connection.
- 29 On the arithmetical approach, where an event or circumstance is caused by the cumulative contribution of many actions each contributing a quantitatively small proportion, no single action can be a substantial cause of that event or circumstance. On the Applicants' construction, by contrast, 'substantial cause' requires a qualitative

⁴⁹ See particularly (g) of Ground 1 in VID1400/2025 and Ground 4 in 1356/2025.

evaluative judgment about the nature and character of the causal connection between the action and the specific event or circumstance, which cannot be answered solely by reference to the action's proportional contribution.⁵⁰

- 30 The Special Rapporteur submits that the Applicants' construction is correct. The phrase 'substantial cause' in s 527E(1)(b) requires a qualitative evaluative judgment as to whether the causal connection between the action and the relevant event or circumstance is real, meaningful, and of substance. On that construction, a finding that the proposed action would contribute only a 'very small' proportion of global emissions, or would produce 'no net increase' in global emissions by reason of market substitution, does not answer the question whether the action is a substantial cause of the physical effects of climate change, for example on the National Heritage values of the Dampier Archipelago.
- 31 Before turning to the way that international law should inform this constructional choice, it is necessary to say something about the context and purpose of that provision and its consideration in the authorities.

Context and purpose of s 527E(1)(b)

- 32 The definition of 'impact' in s 527E was inserted into the EPBC Act by the *Environment and Heritage Legislation Amendment Act (No 1) 2006* (Cth) (**2006 Amending Act**).
- 33 The Explanatory Memorandum to the 2006 Amending Act stated:
- The purpose of the amendment is to clarify the extent to which impacts which are indirect consequences of actions must be considered or dealt with under the Act. Section 527E applies to all direct and indirect consequences of the taking of an action by a person, which meet the criteria in the section. Subsection 527E(2) only applies in relation to impacts of actions by third parties which are an indirect consequence of the taking of an action by the first person.⁵¹
- 34 Section 527E was introduced in response to *Minister for the Environment and Heritage v Queensland Conservation Council Inc* (2004) 139 FCR 24 (**Nathan Dam case**), in order to clarify direct and indirect impacts.⁵² It came into effect on the same day that the

⁵⁰ See, e.g., Applicant's submissions in VID 1356/2025 at [217].

⁵¹ Explanatory Memorandum to the Environment and Heritage Legislation Amendment Bill (No 1) 2006 (Cth) [519].

⁵² Explanatory Memorandum to the Environment and Heritage Legislation Amendment Bill (No 1) 2006 (Cth) [519]; see also *Australian Conservation Foundation Incorporated v Minister for the Environment* (2016) 251 FCR 308, [156] (Griffiths J).

judgment in *Anvil Hill Project Watch Association Inc v Minister for the Environment and Water Resources* (2007) 243 ALR 784 was handed down in 2007. Although s 527E was referenced in *Anvil Hill*, it was not discussed or interpreted. Justice Stone held that, absent a demonstrated link between a project's emissions and a specific identifiable harm, 'the relatively small contribution of the proposed emissions to total global emissions could not be seen as having a significant impact.'⁵³

Case law on s 527E(1)(b)

- 35 In *Australian Conservation Foundation Incorporated v Minister for the Environment* (2016) 251 FCR 308, Griffiths J considered the application of s 527E in the context of a challenge to the Minister's approval of a large coal mine (the Carmichael mine). The ACF contended that the Minister had misconstrued 'substantial cause', arguing it should mean 'not de minimis' rather than 'weighty or big'. Justice Griffiths rejected the ACF's submissions concerning the Minister's approach to construction, but in doing so accepted that 'substantial cause' is an ambiguous term.⁵⁴ His Honour did not resolve its meaning, finding it was unnecessary for the Minister to address any ambiguity because the Minister 'found it was difficult to identify any causal relationship between the proposed action and any possible environmental impacts.'⁵⁵ His Honour effectively endorsed the Minister's substitution reasoning – that because the coal, if not mined by Adani, might be supplied by another source, then no net contribution to climate change could be established – without requiring that reasoning to be tested against the proper meaning of 'substantial cause'. The Full Court dismissed the appeal without addressing the construction question.⁵⁶ Neither the first instance decision nor the appeal therefore resolved the meaning of 'substantial cause' in s 527E(1)(b).
- 36 In *ECOCQ*, the Full Court considered the meaning of 'substantial cause' in s 527E(1)(b) in the context of a challenge to the Minister's reconsideration decision in respect of two coal mine expansions. The parties accepted that the adjective 'substantial' imported a qualitative assessment to the nature of the causal link.⁵⁷ However, no developed argument

⁵³ *Anvil Hill*, [40]. Not disturbed on appeal: (2008) 166 FCR 54

⁵⁴ *Australian Conservation Foundation Incorporated v Minister for the Environment* (2016) 251 FCR 308, [163(c)].

⁵⁵ *Australian Conservation Foundation Incorporated v Minister for the Environment* (2016) 251 FCR 308, [163(d)].

⁵⁶ *ACF v Minister for the Environment and Energy* [2017] FCAFC 134; (2017) 251 FCR 359.

⁵⁷ *ECOCQ*, [44].

was advanced as to whether ‘substantial cause’ had a qualitative meaning that could not be reduced to an arithmetical analysis.⁵⁸ In those circumstances, Mortimer CJ and Colvin J were not prepared to find error in the Minister’s arithmetical approach, while expressly declining to endorse it as the correct construction.⁵⁹ Justice Horan did not address the question.⁶⁰ In the costs judgment, Mortimer CJ confirmed that ‘there was ... a different approach to this term that may have been available to the Minister as decision-maker.’⁶¹

37 The present proceedings therefore represent an important occasion for the Court to squarely determine the correct construction of ‘substantial cause’ in the climate change context.

38 In other statutory contexts, substantial cause has been described as a cause that is ‘real and of substance’,⁶² which entails a qualitative rather than quantitative analysis. That the phrase is capable of a qualitative construction has some support in the authorities.⁶³ In these circumstances, the presumption of consistency with international law has real work to do. Its meaning in this statutory context is ambiguous. However, even if substantial cause (in this context) is not considered ambiguous, it must be interpreted – as with any statutory causal phrase – by reference to statutory context and purpose.⁶⁴

Australia’s international law obligations informing ‘substantial cause’

39 The presumption of consistency with international law applies to s 527E as it does to all provisions of the EPBC Act. Importantly, s 527E was inserted in 2007, after the principal treaties the EPBC Act was enacted to implement had entered into force for Australia. No post-enactment difficulty arises in relying on the obligations imposed by those treaties as interpretive context.⁶⁵

⁵⁸ *ECoCQ*, [46]-[50].

⁵⁹ *ECoCQ*, [109], [123]-[124].

⁶⁰ *ECoCQ*, [172]-[183].

⁶¹ *Environment Council of Central Queensland Inc v Minister for the Environment and Water (No 2)* [2024] FCAFC 97, [50].

⁶² *Badawi v Nexon Asia Pacific Pty Ltd (t/as Commander Australia Pty Ltd)* (2009) 75 NSWLR 503, [82]; *Fisher v Nonconformist Pty Ltd* (2024) 114 NSWLR 1, [67]-[73] (Kirk JA, Meagher JA agreeing at [1]; Simpson AJA agreeing at [149]). It is noted the language of ‘real or of substance’ is also used: see the discussion in *Australian Conservation Foundation Incorporated v Minister for the Environment* (2016) 251 FCR 308, [163(b)].

⁶³ *ECoCQ*, [44], [132] (Mortimer CJ and Colvin J).

⁶⁴ *Comcare v Martin* (2016) 258 CLR 467, [42] (French CJ, Bell, Gageler, Keane and Nettle JJ). See also *Allianz Australia v GSF Australia* (2005) 221 CLR 568, [99].

⁶⁵ Further, the ICJ Advisory Opinion is what is referred to as *lex lata* (which refers to existing obligations): ICJ Advisory Opinion at [100]. The ICJ was not asked to give a legal opinion on how the law can develop, but was

- 40 The ICJ Advisory Opinion assists in resolving the ambiguity in ‘substantial cause’ in three distinct and reinforcing ways.
- 41 *First*, the ICJ confirmed that individual activities cannot escape the obligation of due diligence simply because their individual contribution to a cumulative harm appears small in isolation.⁶⁶
- 42 *Second*, the due diligence obligation, recalling that it is a stringent obligation, requires States to put in place legislation and administrative procedures to effectively regulate relevant activities.⁶⁷ An administrative procedure that allows a decision-maker to dismiss the climate change impacts of a major gas project on the basis that its proportional contribution to global emissions is arithmetically small does not satisfy this requirement. Because of the nature of climate change and the increasing and cumulative impacts of greenhouse gases, as the Applicants correctly observe, adopting a test which asks ‘whether an action’s effects on the climate are greater than “small”’ will mean the test will not ever be met.⁶⁸ Such an approach denudes the relevant part of the statutory scheme of its protective qualities (and, therefore, deprives it of utility). The qualitative construction, which requires genuine engagement with the specific causal chain between the project’s emissions and the physical effects of climate change on the National Heritage place (and other matters of national environmental significance), does.
- 43 *Third*, the ICJ confirmed that specific climate-related effects must be assessed at the level of proposed individual activities, including their possible cumulative and downstream effects.⁶⁹ The NWSx Project is the kind of individual activity contributing to greenhouse gas emissions that must be specifically assessed at the project level, especially when the matter under discussion is whether a significant expansion in size and time (around 50 years) of a project which produces and processes gas will be authorised.
- 44 The ICJ also relevantly confirmed that the diffuse and cumulative nature of climate change does not preclude finding a breach of States’ obligations. Causation of damage is

asked to identify the existing obligations of States to protect the climate system and other parts of the environment from significant harm. As the ICJ said: ‘its response ... is limited to identifying the existing obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic GHG emissions, thereby elucidating the content of these obligations, and clarifying the relationship between obligations arising from various sources of international law’ (at [100]).

⁶⁶ ICJ Advisory Opinion, [277].

⁶⁷ ICJ Advisory Opinion, [282].

⁶⁸ Applicant’s submissions in VID 1356/2025 at [218].

⁶⁹ ICJ Advisory Opinion, [295]-[298]

required only for reparation; a breach of an obligation of conduct – such as the failure to exercise regulatory due diligence – is established independently.⁷⁰

- 45 Further, the cumulative nature of climate change (both cause and effect) should not be conflated with the type of cumulative impacts addressed in **Tarkine National Coalition Inc v Minister for the Environment** (2015) 233 FCR 254. Cumulative GHG emissions are the cause of climate change; this is the specific character of the environmental risk itself. As the ICJ said, climate change is the sum of all activities that contribute to anthropogenic GHG emissions over time, not any specific emitting activity, which produces the risk of significant harm to the climate system.⁷¹ The precautionary principle, as mentioned, is an integral part of the general obligation of due diligence under customary international law.⁷² Where there are plausible indications of potential risks, a State would not meet its due diligence obligations if it disregarded those risks. A construction of ‘substantial cause’ that requires arithmetical proof of causal significance is inconsistent with the precautionary principle (and also ‘likely’, the less stringent criteria for protection under the EPBC Act), because it demands certainty of contribution before obligations arise, including the obligation to assess the impact under Part 8 of the EPBC Act.
- 46 Australia is a party to the Paris Agreement, under which it must pursue domestic mitigation measures, including regulating private actors, with the aim of achieving Nationally Determined Contribution which is capable, when taken together with other NDCS, of limiting global average temperature rise to 1.5°C.⁷³ Although the Paris Agreement post-dates s 527E, the ‘always speaking’ approach to statutory interpretation supports its relevance. Further, although the Paris Agreement is not implemented through the EPBC Act, climate change is a principal threat to the protected matters of national environmental significance under that Act. A construction of ‘substantial cause’ that allows individual project contributions to that threat to be dismissed as arithmetically insignificant (when looked at in isolation) cannot be reconciled with Australia's commitment under the Paris Agreement to pursue domestic mitigation measures with the aim of limiting global average temperature rise to 1.5°C.

⁷⁰ ICJ Advisory Opinion, [435]-[436].

⁷¹ ICJ Advisory Opinion, [137] and [277].

⁷² ICJ Advisory Opinion, [293]-[294].

⁷³ ICJ Advisory Opinion, [250]-[254].

- 47 In any event, the assessment of environmental impacts is an integral part of the way in which the EPBC Act achieves its statutory purposes. The reduction of the statutory concept of ‘substantial cause’ to an arithmetical calculation undermines the assessment process and (therefore) the achievement of the EPBC Act’s important objectives.

Conclusion on ‘substantial cause’

- 48 Applying the presumption of consistency with international law, the better interpretation of ‘substantial cause’ is that it cannot be answered in a purely arithmetical way. An action may be a substantial cause of an event or circumstance even if its contribution is numerically small, whether measured as a percentage of global emissions, or as a fraction of global average temperature increase. What is required is a qualitative analysis that may be informed by arithmetical considerations but cannot be dictated by them.
- 49 The Minister's reasoning was purely arithmetical. It did not constitute the qualitative evaluative judgment that ‘substantial cause’ requires. As a result, it did not consider the specific risk and significant harm that the action would have had, as mandated by international law. International law supports the construction of ‘substantial cause’ advanced by the Applicants.

Section 137A and the obligation to ‘not act inconsistently’ with National heritage management principles – Ground 6 and separate question on Ground 7 in VID1357/2025

- 50 The Special Rapporteur makes no submission on whether s 137A of the EPBC Act imposes an objective jurisdictional condition or a subjective satisfaction requirement.
- 51 It should be noted that the National Heritage management principles do not derive from an international treaty obligation. However, the principles (contained in Schedule 5B of the *Environment Protection and Biodiversity Conservation Regulations 2000*) parallel principles found in international law and must be understood in light of them.
- 52 In particular, Objective 1, which requires that heritage values be ‘identified, protected, conserved, presented and transmitted, to all generations’, must be understood in light of the principle of intergenerational equity under international law (summarised in relation to climate change above at paragraphs [19]-[20]).

- 53 Intergenerational equity has particular force where harm is irreversible. The ICJ Advisory Opinion’s identification of irreversibility as central to the principle,⁷⁴ citing the IPCC finding that ‘many changes will be irreversible on centennial to millennial time scales,’⁷⁵ is relevant here because the petroglyphs of the Dampier Archipelago are irreplaceable.
- 54 If compliance with s 137A is an objective question for the Court (Ground 6), the ICJ Advisory Opinion’s articulation of intergenerational equity should inform the objective assessment of consistency with Objective 1. The question for the Court would be whether the Approval Decision, which approved the action for 45 years with conditions that cannot respond to unknown future emissions, is consistent with an obligation to protect and transmit the heritage values of the Dampier Archipelago to all generations.
- 55 If compliance with s 137A requires the Minister to be satisfied that he would not act inconsistently with the management principles (Ground 7), the ICJ Advisory Opinion bears on the standard to which that satisfaction must be formed. The Advisory Opinion confirms that where ‘there is generally recognised scientific evidence that it is highly probable that significant harm will occur, the standard of due diligence will be more demanding.’⁷⁶ The Minister’s acceptance of the risk of serious and irreversible damage to the petroglyphs elevated rather than reduced what was required.

Section 134(1) and the power to attach conditions ‘necessary or convenient’ for ‘protecting’, ‘repairing or mitigating’ – Ground 3 in VID1356/2025 and Grounds 3, 4 and 5 in VID1357/2025

- 56 Ground 3 in VID1356/2025 and Grounds 3, 4 and 5 in VID1357/2025 broadly all concern the power in s 134(1) to attach conditions to the approval of an action where the Minister is satisfied that the condition is ‘necessary or convenient’ for ‘protecting’ a Part 3 matter or ‘repairing or mitigating’ damage to a Part 3 matter (that is, a matter of national environmental significance). The Special Rapporteur makes the following general submissions as to the power to attach conditions.

⁷⁴ ICJ Advisory Opinion, [156].

⁷⁵ IPCC, Climate Change 2023: Synthesis Report, Summary for Policymakers [Core Writing Team, H. Lee and J. Romero (eds.)], IPCC, Geneva, Switzerland (2023), p 24, Statement C.1.3, as cited in ICJ Advisory Opinion, [156].

⁷⁶ ICJ Advisory Opinion, [283].

- 57 *First*, the power to attach conditions is an important mechanism in the EPBC Act's balancing of the protection of the environment with the attainment of other statutorily acknowledged benefits (including economic benefits which outweigh the economic detriments) that can flow from regulated projects. Understood in this way, the existence of the power coheres with the non-absolute nature of many of Australia's international obligations and the way that those obligations afford a 'margin of appreciation' to the government, a concept that originated out of international law but is familiar to domestic Australia law.⁷⁷
- 58 *Second*, the language of protection, repair and mitigation in s 134(1) makes plain that the provision is intended to have a remedial operation. Accordingly, and consistently with orthodox principles of statutory interpretation, it should be given a 'large and liberal' interpretation.⁷⁸ That remains true even though the EPBC Act more broadly can be acknowledged to be a statute that strikes a balance between competing priorities. The point for present purposes is that the individual provision under consideration, s 134(1), is remedial or protective in nature and should be interpreted accordingly.
- 59 *Third*, the power to impose conditions must be given real teeth in order to give effect to Australia's obligations under international law. This is so especially in relation to potential irreversible harms. The ICJ has emphasised that the due diligence standard in the climate change context is 'stringent' and requires 'a heightened degree of vigilance and prevention.'⁷⁹ Where a decision-maker has identified a significant risk of climate-related harm, that heightened standard informs what conditions are necessary and reasonable, and whether the conditions imposed are sufficient to protect, repair or mitigate the harm.

CONCLUSION

- 60 For the above reasons, the Special Rapporteur seeks to submit that the presumption of consistency with international law supports the qualitative construction of 'substantial cause' in s 527E(1)(b), and that the obligation in s 137A to protect and transmit National Heritage values 'to all generations' must be understood in light of the principle of

⁷⁷ See generally C Ward, 'The Margin of Appreciation in Australian Jurisprudence' (2003) 23 *Australian Bar Review* 189.

⁷⁸ *IW v City of Perth* (1997) 191 CLR 1, 12 (Brennan CJ and McHugh J, quotation marks and citation omitted).

⁷⁹ ICJ Advisory Opinion, [138].

intergenerational equity under customary international law. Interpreting these provisions consistently with Australia's international obligations best advances the protective purpose of the EPBC Act.

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**On behalf of Astrid Puentes
Riaño, the United Nations
Special Rapporteur for the
human right to a clean, healthy
and sustainable environment**

Annexure - Summary of climate change-related international law obligations

	Mitigation	Adaptation	Co-operation and assistance
United Nations Framework Convention on Climate Change ('UNFCCC') Convention adopted on 9 May 1992 and opened for signature on 4 June 1992. Ratified by Australia; entered into force on 21 March 1994	Article 2 – Ultimate Objective of the UNFCCC - The "ultimate objective" of the UNFCCC sets the objective "in the light of which the other treaty provisions are to be interpreted and applied" (ICJ AO, [197]). - Sets an overall framework for intergovernmental efforts to tackle the adverse effect of climate change, with state parties to aim to reach global peaking of greenhouse gas (GHG) emissions as soon as possible and within a timeframe to allow ecosystems to adapt naturally to climate change (ICJ AO, [63]). - The Intergovernmental Panel on Climate Change ('IPCC') definition of the climate system substantially aligns with that under the UNFCCC, which defines the climate system as 'the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions' (ICJ AO, [75]). Article 4(1) - Limit peaking of GHG emissions International Court of Justice Advisory Opinion of 23 July 2025, 'Obligations of States in respect of climate change' (ICJ AO'), [194] - Requires State parties to aim to reach global peaking of greenhouse gas ('GHG emissions as soon as possible (ICJ AO, [194]). Article 4(1)(a) - Inventories of GHG emissions and sinks - Develop, update, publish and make available national inventories of anthropogenic GHG emissions and removals by sinks (ICJ AO, [201]). Article 4(1)(b) - Formulate programmes - Formulate, implement, publish and regularly update national and regional programmes containing measures to mitigate climate change by addressing GHG emissions, and measures to facilitate adequate adaptation (ICJ AO, [201]). Article 4(1)(j) - Communicate to COP	Article 4(1) - Programmes and plans to facilitate adaptation ICJ AO, [210] - Parties must formulate, implement, publish and regularly update national, and where appropriate, regional programmes containing measures to facilitate adequate adaptation to climate change. - Parties should collaborate to address climate change impacts by creating integrated plans for coastal management, water resources, agriculture, and protecting or restoring areas affected by drought, desertification, and floods, especially in Africa. - Social, economic, and environmental policies should consider climate change and use nationally determined impact assessments to minimize any negative effects adaptation projects may have on the economy, public health, or the environment. Article 4(4) - Annex II parties to assist developing countries ICJ AO, [211] - Annex II parties must assist developing country parties that are particularly vulnerable to the adverse effects of climate change in meeting the costs of adaptation to those adverse effects. Article 4(8) - Parties to consider funding, insurance and transfer of technology ICJ AO, [212] - Parties should give consideration to necessary actions including funding, insurance and transfer of technology to meet the specific needs and concerns of developing country parties arising from climate change and/or response measures.	Article 4(1)(c) - Technology and processes to limit GHG emissions ICJ AO, [214] - Parties must co-operate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic GHG emissions. Article 4(1)(d) - Technology and processes to limit GHG emissions ICJ AO, [214] - Parties must co-operate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all GHG, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems. Article 4(1)(e) - Adaptation to impacts of climate change ICJ AO, [70] - Parties must co-operate in the adaptation to the impacts of climate change. Article 4(1)(g) & Article 5 - Research and its promotion ICJ AO, [214] - Parties must co-operate and promote scientific, technological, technical, socioeconomic and other research. Article 4(1)(h) - Information exchange ICJ AO, [214] - Parties must co-operate and promote the exchange of relevant scientific, technological, technical, socioeconomic and legal information. Article 4(1)(i) - Education and awareness ICJ AO, [214] - Parties must co-operate in education, training and public awareness related to climate change including by facilitating public participation in addressing climate change and its effects and developing adequate responses. Article 4(3)-(5) - Assistance to developing country parties ICJ AO, [217]

	- Communicate information to the Conference of the Parties (COP) related to implementation (ICJ AO, [201]). Article 4(2)(a) - Adopt national policies ICJ AO, [205] - Developed country parties and Annex I parties must adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic GHG emissions and protecting and enhancing its GHG sinks and reservoirs. Article 4(2)(b) - Communicate policies and measures ICJ AO, [206] - Annex I parties must periodically communicate detailed information on policies and measures, and projected emissions/removals with the aim of returning to 1990 levels. Article 4(2)(e) - Co-ordinate instruments and review policies ICJ AO, [206] - Annex I parties must co-ordinate with other parties on economic and administrative instruments and periodically review policies leading to greater GHG emissions. - Annex I parties must identify and periodically review its own policies and practices which encourage activities that lead to greater levels of anthropogenic emissions of GHG not controlled by the Montreal Protocol than would otherwise occur. ICJ AO, [207] - All of these obligations are legally binding to the Parties regardless of whether the obligation is one of result or one of conduct.		Annex II parties and developed country parties must provide financial assistance, technology transfers and other forms of support to developing country parties, especially those countries that are particularly vulnerable to the adverse effects of climate change.
Kyoto Protocol 11 December 1997 – Protocol adopted at Kyoto; opened for signature 16 March 1998. Ratified by Australia on 12 December 2007;	Concretised and quantified emission reduction commitments ICJ AO, [219]-[221] Annex I parties listed in Annex B must comply with quantified emission reduction commitments during specified commitment periods (2008–2012 and 2013–2020).		

entered into force for Australia on 11 March 2008.	- Non-compliance with emission reduction commitments may constitute an internationally wrongful act. - Though no commitment period beyond 2020 has been set, the Protocol remains part of applicable law and its provisions serve as interpretive aids and substantive provisions to assess compliance.		
Paris Agreement 12 December 2015 – Agreement adopted at Paris; opened for signature 22 April 2016. Ratified by Australia on 10 November 2016; entered into force for Australia on 10 December 2016.	Preamble - Among other things, acknowledges 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. Article 2(1) – Aims of the Paris Agreement ICJ AO, [222]-[229] - The 1.5°C threshold (not the 2°C threshold) in Article 2(1) is the parties’ agreed primary temperature limit for limiting the global average temperature increase under the Paris Agreement. - This temperature limit in Article 2, which is also referenced in Article 4(1), constitutes, in addition to the object and purpose of the Agreement, the context relevant for interpretation of other obligations in the Paris Agreement, such as the mitigation obligations under Article 4. Article 4(1) - Obligation to achieve net zero emissions ICJ AO, [272]-[300] - Parties must aim to reach a global peaking of GHG emissions as soon as possible and to undertake rapid reductions thereafter to achieve net zero emissions by balancing anthropogenic GHG emissions and their removal by sinks by the second half of the century. - This obligation is informed by the context of the treaty, including the collective temperature limit	Article 7(9) - Plan and implement adaptation measures ICJ AO, [255]-[259] - Parties must engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions. - Actions to meet this obligation include: - Implementation of adaptation actions, undertakings and/or efforts - Art 7(9)(a); - Formulation and implementation of national adaptation plans - Art 7(9)(b); - Assessment of climate change impacts and vulnerability, to determine prioritised actions taking into account vulnerable people, places and ecosystems - Art 7(9)(c); - Monitoring, evaluating and learning from adaptation plans, policies, programmes and actions - Art 7(9)(d); - Building resilience of socio-economic and ecological systems including through economic diversification and sustainable management of natural resources - Art 7(9)(e). - Parties must use their best efforts, in line with the best available science, with a view to achieving these objectives. - Measures that may be effective to meet this obligation include: - Restoration of ecosystems; - Creation of early warning systems; - Resilience-enhancing infrastructure; - Regenerative farming; - Crop diversification; - Weatherproofing of buildings; - Managing land to reduce wildfire risk.	Article 12 - Co-operate to enhancing education and awareness ICJ AO, [260] - Parties co-operate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation, and public access to information. Article 7(6) and 7(7) - Co-operate to enhancing education and awareness ICJ AO, [260] - Parties must co-operate with respect to adaptation, loss and damage. Article 9 - Co-operate by providing financial assistance ICJ AO, [263] -[265] - Developed states must provide financial resources to developing states for both mitigation and adaptation. - These obligations are to be implemented in a manner and at a level that allows for the achievement of the collective maximum limit temperature, with that level being evaluated on the basis of factors including the capacity of developed states and the needs of developing states. - Relatedly there are legally binding obligations for developed parties to communicate information on project climate finance - Art 9(5) to 9(7). Article 10 -Technology development and transfer ICJ AO, [266] - Parties must strengthen cooperative action on technology development and transfer - art 10(2). - Additionally, parties are required to provide financial support to developing country parties for the purpose of enabling technology transfer and development - art 10(6). Article 11 - Capacity-building ICJ AO, [267] -[268]

	(which is to limit warming to no more than 1.5°C). (ICJ AO [231]) Article 4(2) - Obligation to prepare and communicate NDCs ICJ AO, [230]-[233] - Parties must outline and communicate their climate actions. Substantively, this must include the preparation, communication and maintenance of successive Nationally Determined Contributions ('NDCs') that the State intends to achieve. In connection with the NDC obligation, each party is required to: - Communicate a NDC every five years - Art 4(9); - Account for their NDCs - Art 4(13); - Register their NDCs - Art 4(12). - Failure to prepare, communicate and maintain successive NDCs, to account for them and to register them would amount to a breach of these obligations. Article 4(3) - Ensure NDCs reflect the highest possible ambition ICJ AO, [237]-[249] - Each party's successive NDC must represent a progression beyond their then-current NDC and reflect its highest possible ambition. - The ambition contained in a party's NDC must be adequate to ensure that, when taken together, they not pass the 1.5°C temperature maximum limit and the stabilisation of GHG in the atmosphere. - The standard of due diligence required when preparing NDCs is stringent - each party must do its utmost to ensure that the NDCs it puts forward represent its highest possible ambition. - The NDCs should reflect common but differentiated responsibilities and respective capabilities in light of different national circumstances. - Developed countries should take the lead with economy-wide absolute emission reduction targets, whereas developing party countries are expected to continue enhancing their mitigation efforts. However, the obligation to prepare and		- Parties co-operate to build the capacity of developing countries to implement the Paris Agreement, in particular that of least developed countries and small island developing states. - Whether developed or developing, parties that enhance the capacity of a developing country party shall communicate the relevant capacity-building actions and measures regularly.
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	communicate NDCs capable of preventing surpassing the 1.5°C temperature limit applies to all parties to the Agreement. Article 4(2) - Implement NDCs and pursue domestic mitigation ICJ AO, [229], [250]-[254] • All parties must pursue domestic mitigation measures, exercising due diligence in their efforts and in deploying appropriate means to take domestic mitigation measures, including in relation to activities carried out by private actors. ○ Parties are required to make best efforts to achieve the NDCs; ○ States must be proactive and pursue measures that are reasonably capable of achieving the NDCs; ○ Measures may include putting in place a national system, including legislation, administrative procedures and an enforcement mechanism, and exercising adequate vigilance to make such a system function effectively. ○ The required standard of due diligence is stringent. Compliance of parties with their due diligence obligations under the Paris Agreement is assessed on the basis of whether the party in question exercise due diligence and employed best efforts by using all means at its disposal in the performance of that obligation.		
Vienna Convention for the Protection of the Ozone Layer ("Ozone Layer Convention") and Montreal Protocol on Substances that Deplete the Ozone Layer ("Montreal Protocol") Vienna Convention: 22 March 1985 – adopted at Vienna. Acceded by Australian on 16 September 1987.	Ozone Layer Convention, Article 2 ICJ AO, [320] • General obligation 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. • Parties are required in accordance with the means at their disposal and their capabilities to take measures to co-operate and adopt appropriate legislative or administrative measures.		

Montreal Protocol: 16 September 1987 – adopted at Montreal. Ratified by Australia on 19 May 1989; came into force on 1 January 1989.	Montreal Protocol, Article 2 ICJ AO, [323] - Establishes the core binding obligation on each Party to ensure that its production and consumption of controlled substances do not exceed specified limits and is progressively reduced over time. - These obligations apply on a twelve-month control period basis and are legally mandatory for Parties.		
Convention on Biological Diversity Adopted on 5 June 1992; entered into force on 29 December 1993. Ratified by Australia on 18 June 1993; entered into force on 29 December 1993.	Article 1 ICJ AO, [325] - State parties have objectives under the Convention of Biological Diversity of: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources. - The biosphere is a component of the climate system comprising all ecosystems and living organisms, in the atmosphere, on land (terrestrial biosphere) or in the oceans (marine biosphere), including derived dead organic matter, such as litter, soil organic matter and oceanic detritus. Article 3 ICJ AO, [327] - States parties have 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, which reflects the customary duty of preventing significant harm. Article 6 ICJ AO, [328] - Each State party must, in accordance with its particular conditions and capabilities, develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity.		

	- States must integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. Article 7(c) ICJ AO, [329] - States are required, as far as possible and as appropriate, to identify and monitor processes and categories of activities that have, or are likely to have, significant adverse impacts on the conservation and sustainable use of biological diversity. Article 8(l) ICJ AO, [329] - Where significant adverse effects have been identified, as far as possible and as appropriate, to regulate or manage the relevant processes and categories of activities, including those which contribute to anthropogenic GHG emissions.		
United Nations Convention to Combat Desertification Adopted on June 17, 1994, and formally entered into force in December 1996. Ratified by Australia on 15 May 2000.	Article 4(2)(a) ICJ AO, [333] States parties are required to adopt an integrated approach addressing the physical, biological and socio-economic aspects of the processes of desertification and drought.		Article 4(2)(d) ICJ AO, [333] - States parties must promote cooperation among affected country Parties in the fields of environmental protection and the conservation of land and water resources, as they relate to desertification and drought. Article 6 ICJ AO, [333] - Developed country parties must support affected developing country parties in their efforts to combat desertification and mitigate the effects of drought, including through the provision of financial resources. Article 8 ICJ AO, [333] - Requires States parties to encourage the co-ordination of their actions and commitments undertaken in the framework of the Desertification Convention, the UNFCCC and the Biodiversity Convention.

Customary International Law	The duty to protect the environment and the climate system, and therefore to prevent significant harm to the environment ICJ AO, [272]-[300] • Applies to the climate system, which is an integral and vitally important part of the environment, and which must be protected for present and future generations (ICJ AO [273]). • Accordingly, the duty is to prevent significant harm to the climate system and other parts of the environment. • This duty is <i>erga omnes</i>, that is, one owed to the international community as a whole (ICJ AO, [440]). • The duty has two elements: (ICJ AO [272]-[299])). <u>1. First element - Risk of significant harm to the climate system and other parts of the environment:</u> This risk: ○ Depends upon the environmental context, requiring regard to the particular environmental setting and circumstances of the activity in question (ICJ AO, [294]-[296]); ○ Includes both where no harm yet exists but there is risk of future significant harm, or where some harm exists and there is risk of further significant harm (ICJ AO, [274]); ○ Includes where the harm is from cumulative impacts. The diffuse and multifaceted nature of conduct which contributes to climate change does not preclude the application of the duty (ICJ AO, [276]-[277]); ○ Depends on probability or foreseeability of the occurrence of harm and its severity or magnitude. The higher the probability and seriousness of the harm, the more demanding the standard of conduct (ICJ AO, [275]) ○ Is informed by the best available science, which is currently found in the IPCC reports (ICJ AO, [298]). <u>2. Second element - Due diligence as the required standard of conduct.</u>	The duty to prevent significant harm to the environment ICJ AO, [282] • This duty applies to both mitigation and adaptation. • Adaptation measures reduce the risk of significant harm occurring and are therefore also relevant for assessing whether a State is fulfilling its customary obligations with due diligence. These measures must regulate the conduct of public and private operators within the States’ jurisdiction or control.	The duty to co-operate for the protection of the environment ICJ AO, [301]-[308] • The obligation to co-operate is an important complement to the substantive obligations of every riparian State, which is all the more vital in the case of the climate system as a shared resource that can only be protected through close and continuous co-operation. • The specific nature of climate change requires States to take individual measures in co-operation with other States. ○ States have obligations to make individual contributions to collective efforts; ○ The interpretation and fulfilment of their substantive obligations must take into account the situation of other states and be fulfilled in co-operation with other states. ○ Discharge of the duty is not only by the conclusion and fulfilment of treaties. • States have some discretion in determining the means for regulating their GHG emissions. ○ Discretion cannot serve as an excuse for States to refrain from co-operating with the required level of due diligence; ○ or to present their effort as entirely voluntary contributions which cannot be subjected to scrutiny. • Duty to co-operate is founded on recognition of the interdependence of States. ○ Requires more than transfer of finance or technology; ○ Requires efforts to continuously develop, maintain and implement a collective climate policy based on equitable distribution of burdens and common but differentiated responsibilities and respective capabilities. • Customary duty provides standard for determining whether existing co-operation including treaties and their implementation still serve their purpose, and whether further collective action must be taken.
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	This due diligence standard: ○ is stringent (ICJ AO, [138]); ○ includes application of the precautionary principle (ICJ AO, [293]); ○ varies based on common but differentiated responsibilities and capabilities according to national circumstances. Relevantly to Australia, developed countries must take more demanding measures to prevent environmental harm and meet a more demanding standard of conduct (ICJ AO, [292]); ○ Includes substantive and procedural obligations. ○ Substantive obligations require States to: ▪ Use all means at its disposal to prevent significant harm to the climate system and other parts of the environment (ICJ AO, [281]); ▪ Put in place a national system, including legislation, administrative procedures and an enforcement mechanism necessary to regulate activities (including public and private operators) and be accompanied by an effective enforcement and monitoring mechanisms (ICJ AO, [281]-[282]). ○ Procedural obligations require States to: ▪ Undertake risk assessment and environmental impact assessment. This includes assessment of proposed individual activities within their jurisdiction or control for their potential to cause significant climate-related harm, including through downstream and transboundary effects (ICJ AO [298]); ▪ Take into account relevant international rules and standards, including international binding obligations and non-binding rules (ICJ AO [288]); ▪ Take into account scientific and technical information, including the best available science. The best available science is the IPCC		
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	reports at the date they are published. However, the standard of due diligence becomes more demanding in the light of new scientific and technological knowledge (ICJ AO [284]). Note that the Inter-American Court of Human Rights (IACtHR) found a similar duty had reached level of peremptory norm (where there must be no derogation).		
United Nations Convention on the Law of the Sea Adopted and opened for signature on 10 December 1982; entered into force on 16 November 1994. Ratified by Australia on 5 October 1994 and entered into force for Australia on 16 November 1994.	Article 192 - General obligation to protect and preserve the marine environment International Tribunal for the Law of the Sea Advisory Opinion ('ITLOS AO'), [384]-[400], ICJ AO [336]. - States have the obligation to protect and preserve the marine environment, which represents over 95 per cent of the biosphere and is a component of the climate system. - Anthropogenic GHG emissions also have deleterious effects on the marine environment and are considered pollution. Article 194(1) - Prevent, reduce and control marine pollution ITLOS AO, [197]-[243] - Requires States, individually or jointly, to take all measures necessary to prevent, reduce and control pollution of the marine environment from any source, using the best practicable means at their disposal and in accordance with their capabilities, and to endeavour to harmonise their policies. Article 194(2) - Prevent transboundary harm ITLOS AO, [244]-[258] - Requires States to ensure that activities within their jurisdiction or control do not cause pollution damage to other States or their environment, and that pollution does not spread beyond areas where they exercise sovereign rights. Article 194(5) ITLOS AO, [401]-[406] - Requires measures necessary to protect and preserve rare or fragile ecosystems and the habitats		Article 197 - Cooperation on a global or regional basis ITLOS AO [300]-[311] - Requires States to cooperate at the global level and, where appropriate, at the regional level, either directly or through competent international organisations, to formulate and develop international rules, standards, and recommended practices and procedures for the protection and preservation of the marine environment, taking into account the particular characteristics of different regions. Article 200 - Studies, research programmes and exchange of information and data ITLOS AO, [312]-[320] - Requires States to cooperate, directly or through competent international organisations, to promote studies, undertake scientific research programmes, and encourage the exchange of information and data relating to pollution of the marine environment. States must also endeavour to participate actively in regional and global programmes aimed at improving knowledge about the nature and extent of marine pollution, exposure pathways, associated risks, and potential remedies. Article 201 - Scientific criteria for regulations ITLOS AO, [312]-[320] - Requires States to cooperate, directly or through competent international organisations, to establish appropriate scientific criteria for developing rules, standards, and recommended practices and procedures to prevent, reduce and control pollution of the marine environment, taking into account the information and data acquired under Article 200.

	of depleted, threatened or endangered species and other forms of marine life. Article 206 - Obligation to conduct environmental impact assessments ITLOS AO [352]-[367] - Requires States, where there are reasonable grounds to believe that planned activities under their jurisdiction or control may cause substantial pollution or significant and harmful changes to the marine environment, to assess the potential environmental effects of those activities, as far as practicable, and to communicate reports of the results. - Requires States to assess the potential effects of planned activities under their jurisdiction or control where there are reasonable grounds to believe those activities may cause substantial pollution or significant and harmful changes to the marine environment, and to communicate reports of those assessments in accordance with Article 205. Article 204 - Monitoring the risks or effects of pollution ITLOS AO, [346]-[349] - Requires States, as far as practicable and consistent with the rights of other States, to monitor, observe, measure and analyse the risks and effects of marine pollution using recognised scientific methods. States must also keep under surveillance the environmental effects of activities they permit or undertake to determine whether those activities are likely to cause pollution of the marine environment. Article 61(2)–(4) - Conservation of living resources in the exclusive economic zone ITLOS AO [412]-[414], [417]-[418] - Requires coastal States to ensure, based on the best available scientific evidence, that living resources in the exclusive economic zone are not endangered by over-exploitation through appropriate conservation and management measures, cooperating with relevant international organisations where appropriate. These measures must aim to maintain or restore harvested species		Article 202 - Scientific and technical assistance to developing States ITLOS AO, [322]-[339] - Requires States, directly or through competent international organisations, to assist developing States in protecting and preserving the marine environment and preventing, reducing and controlling marine pollution, including through training, participation in international programmes, provision of equipment and facilities, capacity building, assistance in responding to major pollution incidents, and support in preparing environmental assessments. Article 203 - Preferential treatment for developing States ITLOS AO, [322]-[339] - Requires that developing States be given preferential treatment by international organisations, including priority access to funds, technical assistance, and specialised services, for the purposes of preventing, reducing and controlling marine pollution and minimising its effects. Article 205 - Publication of reports ITLOS AO, [350]-[352] - Requires States to publish reports on the results of monitoring conducted under Article 204 or provide those reports at appropriate intervals to competent international organisations, which should make them available to all States. Article 63 - Stocks occurring within multiple exclusive economic zones or adjacent high seas ITLOS AO [419]-[428] - Requires coastal States to cooperate, either directly or through appropriate regional or subregional organisations, to agree on conservation and management measures where the same fish stocks occur within the exclusive economic zones of two or more coastal States. Where stocks occur both within an exclusive economic zone and in adjacent high seas areas, the coastal State and States fishing those stocks in the adjacent area must seek to agree on measures necessary for their conservation
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	at levels capable of producing maximum sustainable yield, taking into account environmental and economic factors, fishing patterns, and international standards. States must also consider the impacts on species associated with or dependent on harvested species and ensure their populations are maintained or restored to levels that do not threaten their reproduction. Article 117 - Duty to conserve living resources of the high seas ITLOS AO [415] - Requires all States to take, or cooperate with other States in taking, measures necessary for the conservation of living resources of the high seas in relation to their nationals, including those engaged in activities on the high seas. This obligation applies to all States, not only flag States. Article 119(1) - Conservation of living resources on the high seas ITLOS AO [416]-[418] - Requires States, when determining allowable catch and conservation measures for living resources on the high seas, to use the best available scientific evidence to maintain or restore harvested species at levels capable of producing maximum sustainable yield, taking into account environmental and economic factors, fishing patterns, stock interdependence, and international standards. States must also consider the effects on species associated with or dependent on harvested species and ensure their populations are maintained or restored to levels that do not threaten their reproduction. Article 196(1) - Pollution from technologies and introduction of species ITLOS AO [429]-[436] - Requires States to take all necessary measures to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, and from the intentional or accidental introduction of alien or		Article 64(1) - Highly migratory species ITLOS AO [419]-[428] - Requires coastal States and other States whose nationals fish for highly migratory species to cooperate, directly or through appropriate international organisations, to ensure the conservation and optimum utilisation of those species throughout the region, both within and beyond the exclusive economic zone. Where no suitable international organisation exists, the relevant States must cooperate to establish one and participate in its work. Article 118 - Cooperation in the conservation and management of living resources ITLOS AO [419]-[428] - Requires States to cooperate in the conservation and management of living resources on the high seas. States whose nationals exploit the same or different living resources in the same area must enter into negotiations to adopt necessary conservation measures and, where appropriate, cooperate to establish subregional or regional fisheries organisations for this purpose.
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	new species that may cause significant and harmful changes to the marine environment.		
Convention Concerning the Protection of the World Cultural and Natural Heritage (‘World Heritage Convention’) Adopted on 16 November 1972; entered into force on 17 December 1975. Ratified by Australia on 22 August 1974; entered into force for Australia on 17 December 1975.	Article 5(c) - Scientific and technical studies - Requires States to develop scientific and technical studies and work out operating methods to counteract dangers threatening its cultural or natural heritage. Article 5(d) - Identification of heritage - Requires States to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of heritage. Operational Guidelines Paragraph 118bis - Carry out assessments - Requires States to ensure that Environmental Impact Assessments, Heritage Impact Assessments, and/or Strategic Environmental Assessments are carried out as a pre-requisite for development projects planned within or around a World Heritage property, to identify development alternatives and recommend mitigation measures against degradation or other negative impacts. Operational Guidelines Paragraph 116 - Corrective measures - Where the intrinsic qualities of a nominated site are threatened by human action yet meet the relevant criteria, States must prepare an action plan outlining the corrective measures required should be submitted with the nomination file. Operational Guidelines Paragraph 15(f) and 15(h) - Protection of heritage - States must not take any deliberate measures that directly or indirectly damage their heritage or that of another State Party, and shall take appropriate legal, scientific, technical, administrative and financial measures to protect the heritage.	Operational Guidelines Paragraph 118 - Climate change planning - States should include disaster, climate change and other risk preparedness as an element in their World Heritage site management plans and training strategies. Operational Guidelines Paragraph 111(c) - Management system cycle - States should ensure that the management system incorporates a cycle of planning, implementation, monitoring, evaluation and feedback to ensure the property can respond to changing conditions.	Article 4 - Identification of heritage - Requires States to recognise that the duty of ensuring identification, protection, conservation, presentation and transmission of heritage belongs primarily to that State, and that it will do all it can, including with any international assistance and co-operation - financial, artistic, scientific and technical -which it may be able to obtain. Article 6(1) - Recognition and respect of heritage - States must recognise that World Heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate, whilst fully respecting the sovereignty of the States on whose territory the heritage is situated. Article 6(2) - Providing help if requested - States must undertake to give their help in the identification, protection, conservation and presentation of heritage if the States on whose territory it is situated so request. Article 6(3) - Not to deliberately damage - States must undertake not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage situated on the territory of other States Parties. Article 7 - System of co-operation and assistance - States must establish a system of international co-operation and assistance designed to support States Parties in their efforts to conserve and identify that heritage. Article 13(7) - International co-operation - States shall co-operate with international and national governmental and non-governmental organisations having objectives similar to those of the World Heritage Convention.

International Human Rights Law	The ICJ held that the adverse effects of climate change - including the impact on the health and livelihoods of individuals through events such as sea level rises, drought, desertification and natural disasters - may significantly impair the enjoyment of certain human rights (ICJ AO, [376]). As such, the full enjoyment of human rights cannot be ensured without protection of the environment and the climate system (ICJ AO, [373]-[375] and [403]-[404]). The ICJ cited the following relevant international human rights law obligations (without trying to be exhaustive): Right to a clean, healthy and sustainable environment - ICJ AO [390]-[393] • The right to a healthy environment is essential and a precondition for the enjoyment of all human rights, enshrined by over one hundred States in their constitutions or domestic legislation. It results from the interdependence between human rights and the protection of the environment. • In so far as States parties to human rights treaties are required to guarantee the effective enjoyment of such rights, they must ensure the protection of the right to a clean, healthy and sustainable environment as a human right, to ensure their human rights obligations can be fulfilled at the same time. Right to Life - protected under Article 3 Universal Declaration of Human Rights ('UDHR'), Article 6 International Covenant on Civil and Political Rights ('ICCPR') and Article 6 Convention of the Rights of the Child ('CRoC') - ICJ AO, [376]-[377] • Climate change adversely affects the enjoyment of the right to life in various ways including through phenomena such as sea level rise, drought, desertification, increase of air pollution and extreme weather events. Environmental degradation and climate change may compromise, and in severe cases violate, the right to life. • Accordingly, States' obligations to respect and ensure the right to life include taking measures to preserve and protect the environment against climate harm caused by public and private actors. Right to Health - protected under Article 12 of the International Covenant on Economic, Social and Cultural Rights ('ICESCR'), article 25 UDHR, article 24(1) CRoC - ICJ AO, [379] • There is a close link between the right to health and the environmental conditions in which an individual lives, with climate change potentially posing the greatest threat to global health in the 21st century according to the WHO. • States are responsible for promoting environmental conditions necessary for the enjoyment of the right to health, including addressing pollution and the adverse effects of climate change. Right to an adequate standard of living - protected under Article 11 ICESCR and Article 25 UDHR - ICJ AO, [380] • Climate change can interfere with the effective enjoyment of these rights given there is a close connection between the environment and the right to an adequate standard of living, including access to food, water and housing. Right to privacy, family and home - protected under Article 17 ICCPR - ICJ AO, [381] • Since the adverse effects of climate change may hinder the enjoyment of this right, a State's failure to implement timely and adequate adaptation measures may violate this right. Rights of Women, Children and Indigenous People • The rights of women, children and Indigenous People may be more severely impacted by the adverse impacts of climate change (ICJ AO [384]). • In relation to the rights of Indigenous Peoples and Children, the Special Rapporteur highlights: ○ Under the United Nations Declaration on the Rights of Indigenous Peoples, Articles 25–29, 32: ▪ States must protect Indigenous Peoples' rights to land, territories and resources; ensure their free, prior, and informed consent in decisions affecting those rights; and safeguard their cultural survival, which is often intrinsically linked to the environment. ▪ In the context of climate change, these obligations imply that States must assess how projects contributing to greenhouse gas emissions may disproportionately affect Indigenous Peoples and ensure that such impacts are fully considered in decision-making processes. Failure to do so risks not only environmental harm, but also independent violations of Indigenous People's rights under international law. ○ Under the CRoC, Articles 6, 24, 27: ▪ States must ensure the enjoyment of a range of rights that are directly threatened by climate change, including the rights to life, highest attainable standard of health, and adequate standard of living. ▪ Procedurally, this can be done by States regulating business activities to prevent environmental harm affecting children, conducting child-sensitive environment take and climate impact assessments, and ensuring that decision-making processes take into account the best interests of the child as a primary consideration (see Committee on the Rights of the Child, General Comment No.26).
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	• In addition to the substantive and procedural international human rights obligations highlighted by the ICJ and discussed above, the Special Rapporteur notes two particularly relevant obligations: ○ United Nations Guiding Principles on Business and Human Rights (Principles 1 and 3) - Pursuant to these Principles, States have a duty to protect against human rights abuses by private actors that requires the adoption of appropriate legislative, regulatory, and adjudicative measures. This obligation requires States to effectively prevent infringements of Covenant rights in the context of business activities, including those arising from environmentally harmful conduct, through the adoption of legislative, administrative and other appropriate measures to ensure effective protection against human rights violations linked to business activities (Committee on Economic and Social and Cultural Rights (CESCR), General Comment No. 24 on State obligations in the context of business activities, UN Doc E/C.12/GC/24 (10 August 2017), [14] (GA 24)). Where projects may affect Indigenous Peoples, States must ensure that such impacts are specifically assessed, including through human rights impact assessments, and that affected communities are consulted in good faith with the objective of obtaining free, prior and informed consent, consistent with international standards (CESCR, GA 24, [17]). ○ The rights to access to information, public participation and access to justice - International human rights law requires States to ensure these three procedural rights, which are both autonomous rights and procedural elements on the right to a healthy environment. These procedural guarantees are essential in the environmental context and require that individuals and communities to be provided with accurate, timely, and relevant information regarding environmental and climate impacts, enabling meaningful participation in decision-making processes. This is particularly significant where, there are identified gaps in the assessment of climate-related impacts, including failures to consider intergenerational effects, broader social and economic consequences, and the full extent of emissions-related harm.
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Certificate of Annexure

No. VID1357 of 2025

Federal Court of Australia

District Registry: Victoria

Division: General

FRIENDS OF AUSTRALIAN ROCK ART INC

Applicant

MINISTER FOR THE ENVIRONMENT AND WATER AND ANOTHER

Respondents

This is the annexure marked **DB-7** produced and shown to David Burke at the time of affirming his affidavit on 27 April 2026.



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Claire Francis Rankin

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An Australian Legal Practitioner within the meaning of the Legal Profession Uniform Law (Victoria)

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Statement by UN Human Rights Experts*

Belem, 18 November 2025

Statement on civic participation at the Climate COP30

We salute and fully support the over 70 thousand people who marched peacefully in Belem last Saturday, to ask for climate justice and for the protection of human rights from climate harm of present and future generations, through meaningful outcomes of the 30th UN Climate COP that are aligned with the 1.5C global temperature increase limit.

We take this opportunity to recall States' obligations and international institutions' responsibilities under international law to protect human rights, including the rights to freedom of expression, assembly and association, and the right to take part in the conduct of public affairs in multilateral fora.

In that connection, we note that protests by Indigenous Peoples were carried out at COP30 over the last days and that the COP30 Presidency and Brazilian government met and heard the legitimate demands of Indigenous Peoples. The protection of Indigenous Peoples' human rights is essential, as they are facing widespread violations not only because of the continued expansion of fossil fuels in their territories, but also just transition projects, mining and carbon credits that do not respect their rights or harm biodiversity, water, food and health. Indigenous Peoples seek to be heard and ask that solutions affecting them are co-developed with them. Critically, these solutions also benefit everyone's human right to a clean, healthy and sustainable environment, including a safe climate.

For now none of the protesters has been harmed or criminalized. We hope that there will be not attempts to press charges or legal reprisals for participation in these mobilizations. Both the host state and the UNFCCC Secretariat must ensure the respect of international standards protecting the right to protest.

We express deep concern about requests to increase security, which have been met by a visible increase in armed security presence at COP30. First, this is not warranted by the circumstances of the protests that happened at COP30. In general, any restrictions on the right to protest must meet the strict requirements of legality, legitimacy, necessity, proportionality and non-discrimination and may be imposed only for the shortest time possible as highlighted in [Guidelines on the Right to Peaceful Environmental Protest and Civil Disobedience](#) by the Special Rapporteur on Environmental Defenders under the Aarhus Convention. And, second, this securitization contributes to create a chilling effect and feeling of insecurity for all participants. Third, it represents a form of [stigmatization](#) of environmental human

rights defenders, and Indigenous Peoples in particular. Rather, their actions should be understood in the context of global trends of increasing and increasingly vicious attacks to defenders and their support organizations, as well as illegitimate limitations to the resources and support systems they can rely upon and generally shrinking of civic space.

Besides, it is problematic to create exclusion zones for demonstrations, in contravention of the “sight and sound” principle for the right to peaceful assembly (CCPR/C/GC/37, para 22). All these trends affect the guarantee of the rights to freedom of expression, assembly and association, right to take part in the conduct of public affairs, the right of access to information and other relevant rights. In addition, these attempts undermine democratic processes to the benefit of the economic interests that have benefited and continue to benefit from the climate crisis and are increasingly in an effort to delay climate action necessary to protect human rights, as underscored by the Inter-American Court of Human Rights in its Advisory Opinion on the Climate Emergency.

We recall that each State at COP30, individually and collectively, as well as the UNFCCC Secretariat as an organ of the UN subject to the UN Charter, have obligations to respect and protect human rights, including freedom of expression and association. “Multilateral institutions, as do States, bear the responsibility to recognize the positive role of peaceful protests and to create space in which civil society organizations can strengthen human rights and democracy. Indeed, multilateral institutions play a key role in stimulating global public debate by strengthening the visibility of civil society organizations and by facilitating peaceful assembly within their structures and programmes” (A/69/365).

We also note that at COP 30, fossil fuel lobbyists continue to significantly outnumber most country delegations in Belém, with one in every 25 attendees representing the industry. We thus reiterate our [call](#) “to curb the presence of fossil fuel lobbyists at the Climate COP, and ensure transparency, public participation, meaningful dialogue with civil society, and effective protection of environmental human rights defenders and their associations.” We also recall that when designing multilateral fora, “sectoral equity is key: civil society representatives should be given the same access, input and power as the private for-profit sector” ([A/69/365](#)).

Further, while we welcome more openness of negotiating meetings to observers compared to previous Climate COPs, the practice of allowing observers only to speak at the end of negotiating sessions does not allow meaningful participation. In other multilateral environmental negotiations, observers can take the floor in real time and make textual suggestions to Parties; these suggestions can then be taken into account if at least one State supports them and then the usual process of seeking consensus among Parties continues. This practice does not undermine in any way a Party-driven process. Rather, it supports Parties in making sure that they are considering the best available science and expertise of observers in their deliberations, which reflects their international obligations under multiple sources of international law. Changing dominating practices of closed-door negotiations and ineffective inclusion of civil society, other observers and scientists in the climate negotiations is overdue.

In conclusion, we urge all States and the UNFCCC Secretariat to uphold human rights in the process and substance of the COP30 negotiations in line with their international obligations as clarified by several UN and regional human rights experts and most recently by the International Court of Justice. We remain available to advise the UNFCCC Secretariat on how to best advance the human rights-based approach in the process at COP30 and beyond.

ENDS

***The experts:**

- *Elisa Morgera, [Special Rapporteur on the promotion and protection of human rights in the context of climate change](#)*
- *Albert K. Barume, [Special Rapporteur on the rights of Indigenous Peoples](#),*
- *Astrid Puentes Riaño, [Special Rapporteur on the human right to a clean, healthy and sustainable environment](#)*
- *Gina Romero, [Special Rapporteur on the rights to freedom of peaceful assembly and of association](#)*
- *Mary Lawlor, [Special Rapporteur on the situation of human rights defenders](#)*
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Certificate of Annexure

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Federal Court of Australia

District Registry: Victoria

Division: General

FRIENDS OF AUSTRALIAN ROCK ART INC

Applicant

MINISTER FOR THE ENVIRONMENT AND WATER AND ANOTHER

Respondents

This is the annexure marked **DB-8** produced and shown to David Burke at the time of affirming his affidavit on 27 April 2026.



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Agenda item 3

**Promotion and protection of all human rights, civil,
political, economic, social and cultural rights,
including the right to development**

Priority actions towards breathing clean air, protecting public health and ensuring a healthy environment

**Report of the Special Rapporteur on the human right to a clean,
healthy and sustainable environment, Astrid Puentes Riaño**

Summary

Breathing clean air is vital for all. Science has unequivocally proven that air pollution poses significant risks to public health, especially for persons in vulnerable situations, and to a healthy environment. The public health crisis can be solved and further risks prevented, as evidenced by research and improved monitoring and governance to tackle main drivers linked to a fossil-fuel-dependent economy and unsustainable activities. Stronger measures to improve air quality, prioritizing health to protect people, must be urgently implemented by States, aligned with their international and human rights obligations. The duty of private actors to support these efforts, and their urgent responsibility to prevent, reduce and remediate pollution, must also be underscored.



I. Introduction

1. The present report is submitted pursuant to Human Rights Council resolution 55/2, building on past reports¹ and research. It contributes to a deeper understanding of air pollution impacts on human rights, including the right to a healthy environment. In the report, which is focused on the protection of marginalized people and groups and based on updated science and legal advances, the Special Rapporteur identifies priority actions for States and businesses to improve air quality with a human rights perspective, highlighting urgent actions required to protect the health of children and of the most vulnerable people.

2. Clean air is an element of the human right to a clean, healthy and sustainable environment, and is essential for the enjoyment of all human rights, including to life and health. However, most people do not enjoy clean air, primarily owing to a lack of health and environmental protections, as economic growth and industrial activity is prioritized. The extraction and use of fossil fuels, inadequate urban and land-use planning, the lack of sustainable public transport, use of biomass for cooking and heating, and unsustainable industrial agricultural practices severely degrade the air everyone breathes.

3. There is extensive and conclusive scientific evidence of the health risks posed by air pollution, which has an impact on all organs of the human body throughout life, including in utero. Children are the most vulnerable, along with older persons, pregnant people, people with pre-existing health conditions, and members of marginalized groups, especially those living in urban areas. Air pollution transcends borders, causing transboundary impacts; systemic inequalities and climate change, ecosystem loss and toxic pollution aggravate the impacts. Currently, air pollution is linked to about 8 million premature deaths annually worldwide, and causes or worsens multiple health harms.²

4. The severity of the situation contrasts with existing solutions, the clarity of States' obligations, and actions and measures that can and must be implemented. Important improvements, including transitions to cleaner energy, stricter emissions controls, improved planning and better public transport, have been implemented, mostly in high-income areas. At the same time, air pollution continues to worsen, especially in low- and middle-income countries. Access to air quality information and how to appropriately monitor and control sources is unequal, as is the access to needed funds and expertise to act. Addressing these gaps is urgent and a clear human rights obligation.

5. The Special Rapporteur extends her gratitude to the Governments of Armenia, Brunei Darussalam, Burundi, China, Colombia, Estonia, Ireland, Jordan, Mexico, Myanmar, Peru, the Republic of Korea, Romania, Saudi Arabia, Serbia, Singapore, Spain and Uzbekistan for the contributions they sent to inform the present report. She also thanks the 60 civil society organizations, international entities, academics, universities and individuals for their inputs, and the 75 participants who attended the four consultations held.³

II. Air pollution: an unequivocal risk for human rights

6. Exposure to polluted air affects all organs and systems in the body, causing or aggravating health harms, including cardiovascular and respiratory diseases, cancer,⁴ miscarriages, reproductive harms, dementia, depression and developmental delays, with cumulative effects that worsen long-term health harms. Many of these are noncommunicable diseases, including cancer and cardiovascular diseases (such as heart attacks and strokes) and chronic respiratory diseases, such as asthma;⁵ 83 per cent of premature deaths associated with

¹ See, for example, [A/HRC/40/55](#).

² See <https://www.stateofglobalair.org/resources/archived/state-global-air-report-2024>.

³ Submissions will be available at <https://www.ohchr.org/en/calls-for-input/2025/call-input-protecting-clean-air>.

⁴ See [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health).

⁵ See <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.

air pollution are from chronic diseases.⁶ These impacts undermine the rights to life, health, a healthy environment and an adequate standard of living, and to equality and non-discrimination, imposing a major burden on public health while being largely preventable, as sources are mainly created by humans.

7. Harms and risks are unequally distributed. Globally, 2.5 billion people are exposed to hazardous particulate matter (PM) concentrations, especially in low- and middle-income countries and regions, such as in South Asia (1,200 million people), East Asia (660 million), sub-Saharan Africa (330 million) and North Africa and the Middle East (224 million).⁷ Over 90 per cent of global air pollution-related deaths are linked to outdoor fine particulate matter (PM_{2.5}),⁸ and concentrations commonly and significantly exceed World Health Organization (WHO) guidelines.

8. Some of the highest levels of nitrogen oxides, including nitrogen dioxide, have been recorded in North Africa, the Middle East, Southeast Asia and East Asia,⁹ reflecting a combination of high-emitting vehicle density, industrial growth and inadequate urban air quality management. Persistent hotspots of sulfur dioxide pollution are found near major industrial hubs in India, Iran (Islamic Republic of), Mexico, the Russian Federation, Saudi Arabia, Serbia, South Africa, Türkiye and the United Arab Emirates.¹⁰ Elevated exposure to carbon monoxide persists in regions reliant on biomass fuels, particularly in sub-Saharan Africa.¹¹

9. The health, developmental and economic consequences of different pollution sources vary. The major sources involve the burning of fossil fuels, such as vehicle emissions and industrial activities, and also include inadequate agricultural practices and uncontrolled fires;¹² inadequate urban planning is an exacerbating factor. The table below summarizes key information regarding the worst pollutants, their sources and the related health impacts; the Special Rapporteur underscores that exposure usually involves several pollutants, and is aggravated by climate change.

Most important pollutants affecting clean air and human health

<i>Pollutant</i>	<i>Source</i>	<i>Impacts on human health</i>
Carbon monoxide (CO)	Incomplete combustion of carbon-based fuels (wood, kerosene and coal) associated primarily with household cooking, wildfires and vehicular emissions	Respiratory acidosis, dizziness and fatigue; life-threatening at high concentrations
Nitrogen oxides (NO _x), including nitrogen dioxide (NO ₂)	Vehicular emissions (fossil fuel combustion), industrial processes, wildfires and coal-power plants	Asthma, reduced lung function and respiratory infections, particularly in children and older persons
Sulfur dioxide (SO ₂)	Fossil fuel combustion in power plants, smelters, heavy industry, flaring and residential heating	Asthma, respiratory symptoms and increased hospital admissions

⁶ See <https://www.who.int/news-room/commentaries/detail/air-pollution--tackling-a-critical-driver-of-the-global-ncd-crisis#:~:text=Air%20pollution%20affects%20virtually%20every,well-being%20and%20public%20health>.

⁷ See <https://documents1.worldbank.org/curated/en/099032625132535486/pdf/P502230-d16d0858-2e18-41df-a7a6-f1188121ac83.pdf>.

⁸ See <https://www.unicef.org/press-releases/air-pollution-accounted-81-million-deaths-globally-2021-becoming-second-leading-risk>.

⁹ See <https://www.stateofglobalair.org/pollution-sources/nitrogen-dioxide>.

¹⁰ See https://www.greenpeace.org/static/planet4-africa-stateless/2019/08/5f139f4c-final-global-hotspot-and-emission-sources-for-so2_19th_august-2019.pdf.

¹¹ See <https://doi.org/10.1016/j.enpol.2025.114936>.

¹² See <https://lancetcountdown.org/air-pollution-and-health/>.

Most important pollutants affecting clean air and human health

<i>Pollutant</i>	<i>Source</i>	<i>Impacts on human health</i>
Particulate matter (PM _{2.5} and PM ₁₀)	Vehicular emissions (fossil fuel combustion), agricultural waste and coal and wood burning	Cardiovascular disease, stroke, respiratory illness, impaired child development, and lung cancer
Short-lived climate pollutants	Black carbon	Neurological damage, slower cognitive development in children, increased bone loss, decreased cognitive function in older persons, cardiovascular and respiratory symptoms, lung and bladder cancer, lower lung function, and premature death
	Methane (CH ₄)	Leukaemia and asthma, especially in children
	Tropospheric ozone (O ₃)	Constricts airways, aggravates lung disease, increases the rate of cardiovascular mortality (heart attacks and strokes), damages the nervous and immune systems; children, older persons and individuals with pre-existing health conditions are most affected
Volatile organic compounds	Industrial and household organic chemicals such as fuels, solvents, paints, refrigerants, pesticides and cleaning agents	Suspected or proven carcinogens; damage internal organs or the respiratory system

Sources: See <https://iris.who.int/server/api/core/bitstreams/551b515e-2a32-4e1a-a58c-cdaecd395b19/content>.

A. More vulnerable populations**1. Children**

10. The right to a healthy environment is essential for children's survival and development.¹³ Still, almost every child globally is exposed to at least one environmental or climate-related hazard, including air pollution. Children are the most vulnerable to air pollution impacts because their bodies and organs are still developing and their immune systems are not fully formed, limiting their capacity to eliminate harmful substances.¹⁴

¹³ See Committee on the Rights of the Child, general comment No. 26 (2023).

¹⁴ See <https://www.unicef.org/media/91216/file/Healthy-Environments-for-Healthy-Children-Global-Programme-Framework-2021.pdf>.

11. This widespread exposure occurs across regions; children in low and middle-income countries face a double burden from both ambient and household air pollution.¹⁵ Over 700,000 children under 5 years of age died in 2021 from causes linked to air pollution – nearly 2,000 per day.¹⁶ Over 70 per cent of these deaths were linked to household air pollution from cooking with polluting fuels, mostly in Africa and South Asia.¹⁷

12. Air pollution is associated with approximately one in three preterm births globally. Babies born prematurely face increased risks of lifelong disabilities, developmental delays and chronic illnesses. Emerging evidence links air pollution to cognitive and mental development impacts. Early childhood exposure to high pollutant concentrations is associated with enduring consequences for health, learning and well-being, such as impaired cognitive performance, reduced educational attainment and greater vulnerability to behavioural and emotional disorders, including attention deficit hyperactivity disorder, anxiety and depression.¹⁸

2. Pregnant people and newborns

13. Pregnant people are particularly vulnerable to the adverse effects of air pollution, owing to the physiological and immunological changes that occur during gestation. Exposure to ambient pollutants has been consistently associated with adverse maternal outcomes.¹⁹ Robust evidence links air pollution to gestational diabetes, hypertensive disorders of pregnancy, pre-eclampsia, spontaneous abortion and post-partum depression.²⁰ Pregnant people and neonates exposed to high levels of pollutants face elevated risks of placental abruption, low birth weight, preterm birth, infant mortality, and long-term respiratory and lung development impairments.²¹ The compound effects of air pollution and climate-related stressors, particularly extreme heat, exacerbate these risks,²² creating a double burden that threatens maternal health, pregnancy outcomes and child development.

3. Older persons

14. Air pollution exacerbates cardiovascular, respiratory and other chronic illnesses and contributes to increased morbidity and mortality in older persons.²³ The Independent Expert on the enjoyment of all human rights by older persons has emphasized the need for policies to reduce air pollution, which disproportionately affects older persons.²⁴ Age-related physiological changes, historical exposure, a higher prevalence of pre-existing health conditions and functional limitations increase the susceptibility of older persons to harmful pollutants, which may affect persons in different ways, depending on multiple factors, including gender.

15. Ageing involves a gradual decline in respiratory, cardiovascular and immune function, reducing the body's resilience to environmental stressors. Furthermore, fossil fuel pollution over a lifetime can lead to chronic illnesses and avoidable deaths; for example, one study of older adults demonstrated that sulfur dioxide exposure from burning coal and oil was associated with premature mortality.²⁵

16. There are strong links between air pollution and neurodegenerative diseases, such as dementia and Alzheimer's disease, and older persons are disproportionately affected. A recent global study estimated that air pollution-related dementia causes over 625,000 deaths

¹⁵ See <https://www.unicef.org/media/105376/file/UNICEF-climate-crisis-child-rights-crisis.pdf>.

¹⁶ See <https://www.stateofglobalair.org/resources/archived/state-global-air-report-2024>.

¹⁷ Ibid., and <https://ceh.unicef.org/country-data/childrens-environmental-health-country-profiles>.

¹⁸ See

https://www.unicef.org/media/49966/file/UNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf.

¹⁹ See <https://doi.org/10.1016/j.scitotenv.2025.178999>.

²⁰ See <https://doi.org/10.1016/j.jpeds.2024.10.006>.

²¹ See <https://doi.org/10.1016/j.semperi.2023.151838>.

²² See <https://doi.org/10.1038/s41591-024-03395-8>.

²³ See <https://www.paho.org/sites/default/files/2022-01/decade-connection-series-climatechange.pdf>.

²⁴ See A/HRC/39/50.

²⁵ See https://climateandhealthalliance.org/wp-content/uploads/2025/09/C2G-Report-low-_res-English.pdf.

annually, underscoring its toll on older persons.²⁶ Extreme heat further amplifies these risks. A single day of extreme heat can elevate hospitalization risks among people with dementia for several subsequent days, with especially severe impacts on marginalized groups.²⁷

17. Exposure to polluted air is linked to oxidative damage to bone cells and significantly reduces bone mineral density, heightening the risk of osteoporosis and fractures, conditions that already disproportionately affect older women:²⁸ in one country, women account for 80 per cent of osteoporosis cases.²⁹

4. Persons living in poverty

18. Structural inequalities disproportionately affect communities living in poverty; often those communities are also racialized. Industrial facilities, transport corridors, extractive industries and other pollution-intensive activities are largely installed close to marginalized communities, sometimes described as “sacrifice zones”.³⁰ Climate change and environmental degradation exacerbate these inequalities. The Inter-American Court of Human Rights has noted that individuals in poverty typically live in climate-vulnerable areas, face greater losses from disasters and have fewer resources to help them recover. When poverty intersects gender, age or disability, vulnerability multiplies.³¹

19. WHO, the United Nations Development Programme, the United Nations Environment Programme and *Lancet* reports have indicated that health impacts in marginalized communities include elevated rates of asthma, bronchitis, lung cancer, heart disease and other chronic respiratory and cardiovascular conditions resulting from prolonged pollutant exposure. Vulnerability is most acute in urban areas of low- and middle-income countries, where persistent pollution hotspots are most common. Cumulative health risks, illness and premature mortality increases when people living in high polluting areas spend their entire lives there; are additionally exposed through long commutes or outdoor work; and have limited access to quality healthcare.

20. As health deteriorates, livelihoods suffer and social exclusion deepens, reducing options to avoid air pollution exposure or mitigate its effects and increasing cumulative environmental health harms. About 716 million of the world’s lowest-income people live in highly polluted areas, many of those in the Democratic Republic of the Congo and in India,³² facing sharply increased risk of asthma, stroke,³³ ischemic heart disease and lung cancer.³⁴ In Nigeria, industrial-zone workers and roadside vendors experience the highest particulate matter levels in sub-Saharan Africa, while indoor biomass use accounts for 30 to 40 per cent of respiratory illnesses in low-income locations. In the United Arab Emirates, migrant workers – 88 percent of the population – suffer severe respiratory, cardiovascular and neurological symptoms linked to outdoor labour. In the United States of America, African American and Latino communities near highways and industrial sites experience higher pollution-related mortality, and along “Cancer Alley” in Louisiana, predominantly African American residents face elevated cancer rates, respiratory disease, reproductive harm and adverse birth outcomes owing to petrochemical emissions; additional petrochemical plants are planned, threatening to deepen these disparities and risks.³⁵

²⁶ See <https://www.stateofglobalair.org/resources/report/state-global-air-report-2025>.

²⁷ See <https://hsph.harvard.edu/news/extreme-heat-may-raise-risk-of-hospitalization-for-adults-with-alzheimers/>.

²⁸ See <https://www.science.org/content/article/breathing-polluted-air-increases-risk-osteoporosis-growing-evidence-shows>.

²⁹ See <https://doi.org/10.1016/j.eclinm.2023.101864>.

³⁰ See A/HRC/49/53.

³¹ See https://www.corteidh.or.cr/docs/opiniones/seriea_32_en.pdf, paras. 624 and 625.

³² See <https://pmc.ncbi.nlm.nih.gov/articles/PMC10363163/>.

³³ See <https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants>.

³⁴ See <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.

³⁵ See <https://www.ohchr.org/en/press-releases/2021/03/usa-environmental-racism-cancer-alley-must-end-experts?LangID=E&NewsID=26824>.

21. In Kenya, low-income communities located near dumpsites, industrial corridors and congested transport hubs endure constant multi-source exposure.³⁶ In Nairobi, PM_{2.5} concentrations reach 3.7 times WHO guidelines, contributing to 400 to 1,900 premature deaths annually, 5 to 8 per cent of adult mortality, and 2 to 3 per cent of economic losses, in terms of gross domestic product.³⁷

III. Main sources and cumulative impacts

22. Air pollution main drivers are human-made, therefore they can and must be prevented and addressed through human action. These drivers emit harmful and toxic substances, including particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds and greenhouse gases, contaminating indoor and outdoor air and creating cumulative impacts that substantially harm health.

23. Transportation dependent on fossil fuels remains one of the largest anthropogenic sources of air pollution. Vehicles emit pollutants through exhaust (tailpipe emissions) or non-exhaust sources (non-tailpipe emissions) such as evaporative emissions of fuel, resuspension of dust, wear of brakes and tyres and abrasion of road surfaces. Traffic-related pollution includes PM_{2.5}, PM₁₀ and nitrogen dioxide – major contributors to urban smog and deteriorating air quality. Because transportation is mainly concentrated in cities, vehicular transit is a main source of urban exposure.

24. Globally, traffic emissions are strongly linked to asthma in children; data from 2015 indicate that over 64 per cent of such cases of asthma occur in urban centres.³⁸ The situation affects all regions.³⁹ Researchers conducting a study in Isfahan, Islamic Republic of Iran, identified vehicular emissions as the dominant source of PM_{2.5} in the city.⁴⁰ During the coronavirus disease (COVID-19) pandemic, PM_{2.5} and nitrogen dioxide concentrations in Delhi, India, fell by roughly half, confirming the massive share of pollution attributable to vehicles.⁴¹

25. Residential heating and cooking with coal and biomass and the use of inefficient technologies are major sources of indoor and outdoor air pollution, especially in poorly ventilated spaces. These sources generate pollutants exceeding WHO air quality guidelines⁴² causing millions of deaths annually (2.9 million, in 2021), mainly affecting women and children, who spend more time exposed to polluting fuels and technologies in the home.⁴³ Indoor and outdoor air pollution are interconnected: emissions from household fuels escape outdoors, contributing significantly to urban air pollution.

26. Human-driven fires worsen air pollution and have significantly increased due to deforestation, land-use change and climate-related factors. In tropical regions, fires are almost entirely anthropogenic; often started to clear land, they then spread uncontrollably. Fires in 2024 burned five times more tropical primary forest than fires in 2023. Latin America is particularly affected and, as the hottest year on record, 2024 brought extreme heat, fuelling over 346,000 fire outbreaks, with PM_{2.5} concentrations exceeding 400 µg/m³ in cities such as Porto Velho, Brazil.⁴⁴ Europe recorded 383,317 hectares burned, which was above the 17-year average, and over 8,300 fires, with Bulgaria, Greece, Italy, Portugal and Spain among the worst affected European Union countries. Preliminary 2025 data suggest an escalation,

³⁶ Submission from Kirigo Wachira.

³⁷ Submission from Gillian Onyango.

³⁸ See [https://www.thelancet.com/journals/lanpla/article/PIIS2542-5196\(19\)30046-4/fulltext](https://www.thelancet.com/journals/lanpla/article/PIIS2542-5196(19)30046-4/fulltext).

³⁹ See <https://www.stateofglobalair.org/resources/health-in-cities#no-sub-2-sub-levels-vis-a-vis-who-guidelines>.

⁴⁰ See <https://doi.org/10.1016/j.jth.2022.101329>.

⁴¹ See <https://doi.org/10.48550/arXiv.2203.02258>.

⁴² See <https://www.undrr.org/terms/hips/EN0101>.

⁴³ See <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>.

⁴⁴ See <https://doi.org/10.1007/s44274-025-00340-5>.

with more than 7,200 fires and over 1 million hectares burned across Europe by mid-year, making it likely the worst fire season on record.⁴⁵

27. Wildfires release large amounts of PM_{2.5} and carbon monoxide and increase ozone. Added to this, dust transported from arid regions can increase pollutant concentrations thousands of kilometres from the source and worsening urban and rural air quality.⁴⁶ The 2023 Canadian wildfires worsened air quality across North America and Europe, contributing to thousands of deaths.⁴⁷ In Australia, wildfire-specific PM_{2.5} was associated with thousands of respiratory hospital admissions.⁴⁸ People in rural areas and Indigenous Peoples face disproportionate exposure; the lack of contingency plans and cross-border cooperation exacerbates violations of the right to health and a healthy environment.⁴⁹

28. Every stage of the fossil-fuel exploration and extraction cycle contributes to air pollution and its harms. Site preparation for coal, oil and gas projects generates dust and diesel exhaust. Communities near extraction sites face additional health impacts, displacement and evictions with violence and legal intimidation; Indigenous Peoples, people of African descent and peasants are particularly affected.⁵⁰

29. Oil and gas extraction also releases methane and volatile organic compounds that drive ozone formation and respiratory disease. Studies have linked proximity to fracking-extracted wells with preterm births, low birth weight and congenital defects. Processing and refining stages release hazardous air pollutants, such as benzene, formaldehyde and toluene.⁵¹ Urban refinery belts and petrochemical zones commonly expose nearby low-income communities to persistent toxic emissions.

30. Coal extraction exposes miners and surrounding communities to particulate matter, diesel particulates, dust chemicals, fuels and elemental toxicants.⁵² Open-pit mining and mountaintop removal release airborne pollutants and heavy metals such as selenium, contaminating soil, air and water. Coal-fired power plants also emit PM_{2.5}, sulfur dioxide, nitrogen oxides and volatile organic compounds; coal ash, a toxic by-product, often contaminates soil, air and groundwater when mismanaged.⁵³ Thus, coal-fired power plant emissions are linked to thousands of premature deaths annually.

31. Flaring – burning gas during oil extraction – emits carbon dioxide, methane, black carbon, nitrogen oxides, sulfur dioxide and volatile organic compounds, such as benzene, harming communities near oil fields. Flaring pollution causes an estimated \$7.4 billion annually in health damages, over 700 premature deaths and 73,000 asthma exacerbations, mainly in children.⁵⁴ Several countries have banned or dramatically reduced the practice, demonstrating that its risks are avoidable. Norway has prohibited flaring except for safety reasons since 1996;⁵⁵ Kazakhstan has reduced associated-gas flaring volumes by over 75 per cent since 2012,⁵⁶ and 36 countries have committed to ending routine flaring by 2030.⁵⁷

32. Many developing countries are expanding renewables, while simultaneously expanding fossil fuel demand. Despite a global increase in renewables, with wind and solar increasing by 16 per cent in 2024⁵⁸ and renewables accounting for 92.5 per cent of new power

⁴⁵ See https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/europes-fire-season-expanding-new-jrc-report-shows-2025-12-05_en.

⁴⁶ See <https://www.who.int/news-room/fact-sheets/detail/sand-and-dust-storms>.

⁴⁷ See <https://doi.org/10.1038/s41586-025-09482-1>.

⁴⁸ See <https://doi.org/10.1038/s41893-025-01535-7>.

⁴⁹ See https://www.oas.org/es/cidh/informes/pdfs/2025/redesca_bolivia_2024_spa.pdf (in Spanish).

⁵⁰ See A/HRC/59/42.

⁵¹ See <https://doi.org/10.1146/annurev-publhealth-040218-043715>.

⁵² See <https://doi.org/10.1016/j.exis.2015.08.006>.

⁵³ See <https://www.nrdc.org/sites/default/files/coalhealth.pdf>.

⁵⁴ See <https://doi.org/10.1029/2023GH000938>.

⁵⁵ See <https://flaringventingregulations.worldbank.org/norway>.

⁵⁶ See <https://www.catf.us/2025/06/kazakhstans-progress-reducing-gas-flaring-model-world/>.

⁵⁷ See <https://www.worldbank.org/en/programs/zero-routine-flaring-by-2030/endorsers>.

⁵⁸ See <https://www.energyinst.org/exploring-energy/resources/news-centre/media-releases/renewables-soar,-but-fossil-fuels-continue-to-rise-as-global-electricity-demand-hits-record-levels?ABOUT=&>.

additions,⁵⁹ fossil fuel production and use are still rising, particularly in the global South. In 2024, energy demand increased for all energy sources; 38 per cent of electricity demand was met by low-emissions sources. However, over 50 per cent of the rise was still linked to fossil fuels.⁶⁰ Coal demand globally rose by over 1 per cent to a record high, driven by power generation needs in China and India, while gas demand reached a new all-time high, especially in emerging markets. Oil demand continued growing in India and Southeast Asia.⁶¹ The increase in fossil fuel use by cities continues to drive high urban exposure, despite progress in renewable deployment.

33. Energy demand in sub-Saharan Africa, the Middle East and Southeast Asia is projected to rise substantially through 2050. In sub-Saharan Africa, fossil fuels still supplied 43 per cent of primary energy in 2024, despite growing investment in renewables.⁶² Similarly, in Southeast Asia, fossil fuels are the main energy source and, even considering increases in renewable energy, under current policies the tendency will continue; furthermore, regional carbon dioxide emissions are projected to rise by one third by 2050.⁶³ In the Middle East and North Africa, fossil fuel dependence is also expected to deepen if oil and gas diversification strategies fall short; demand for both fuels could rise by 25 per cent by 2035.⁶⁴

34. While important efforts to phase it out are being made, coal remains central to the worldwide energy mix. In 2024, total global coal demand rose to 8.8 billion metric tons, an increase of 1.5 per cent over 2023, driven mainly by growing coal use in developing economies. Coal-fired power generation reached a record high in 2024, supplying over a third of global electricity.⁶⁵

35. Major oil, gas and coal projects in Africa, Asia and Latin America are led by Northern capital and demand, perpetuating extracting patterns that externalize environmental and health harms to marginalized communities. Governments and development banks increased funding for fossil fuel projects, from \$1.2 billion in 2021 to \$5.4 billion in 2022, while funding for clean air initiatives remained below 1 per cent of total development assistance.⁶⁶ Despite fossil fuel emissions causing over half of the 8.3 million annual deaths from outdoor air pollution, Governments continue to direct far more resources towards fossil fuel expansion than to pollution reduction.⁶⁷ About 92 per cent of air-quality funding is provided as loans rather than grants, an unusually high share compared with other development sectors. This disparity pushes highly polluted and low-income countries further into debt, precisely when accessible financing to address severe public health risks is greatly needed and should be prioritized.⁶⁸

36. Finally, fireworks, especially in already highly polluted areas, can also cause serious peaks of air pollution, worsening health risks, as seen in Delhi, India⁶⁹ and Mexico City. Therefore, States must implement measures to prevent increased risks, prioritizing public health, especially among vulnerable people; action must include restricting use and enforcing regulations. Some cities, such as Bogotá, have restricted fireworks use, enforcing controls and prioritizing children's health.

⁵⁹ See <https://www.irena.org/News/articles/2025/Apr/Renewables-in-2024-5-Key-Facts-Behind-a-Record-Breaking-Year>.

⁶⁰ See <https://iea.blob.core.windows.net/assets/5b169aa1-bc88-4c96-b828-aaa50406ba80/GlobalEnergyReview2025.pdf>, pp. 3 and 5.

⁶¹ See <https://www.iea.org/reports/renewables-2024/executive-summary>.

⁶² See <https://www.dnv.com/energy-transition-outlook/2025/sub-saharan-africa/>.

⁶³ See <https://www.iea.org/reports/southeast-asia-energy-outlook-2024/executive-summary>, pp. 6 and 18.

⁶⁴ See <https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf>, p. 13.

⁶⁵ See <https://iea.blob.core.windows.net/assets/912db89a-4625-498d-9efc-a558e49b7eab/TheFutureofElectricityintheMiddleEastandNorthAfrica.pdf>.

⁶⁶ See <https://s40026.pcdn.co/wp-content/uploads/State-of-Global-Air-Quality-Funding-2024-UPDATED.pdf>.

⁶⁷ See <https://doi.org/10.1136/bmj-2023-077784>.

⁶⁸ See <https://www.cleanairefund.org/news-item/governments-funding-fossil-fuel/>.

⁶⁹ See <https://doi.org/10.1016/j.atmosenv.2022.119223>.

IV. Obligations of States and duties of businesses regarding clean air

A. States must prevent harms, act with stringent due diligence and implement effective measures to guarantee clean air

37. Given that air pollution poses significant risks to human rights, the environment and the climate system, under international law States have the obligation to protect the environment and prevent significant harms, as clarified by the International Court of Justice in its recent advisory opinion *Obligations of States in respect of Climate Change*. This duty is part of customary international law, is an obligation *erga omnes*, and is also related to transboundary harms such as those from air pollution. Accordingly, States must act with due diligence, preventing risks based on the best available science and considering the probability, foreseeability, severity and magnitude of the occurrence of the harm. In the face of significant risks, the standard of States' due diligence is stringent as regards climate change.⁷⁰

38. States must take appropriate measures, implement precautionary measures when needed and undertake strategic and environmental impact assessments prior to applying policies and implementing activities and projects. Assessments must consider cumulative and long-term impacts,⁷¹ and potential transboundary risks, for which coordination with potentially affected States is needed. Particularly regarding air pollution, States have the obligation to regulate and implement effective measures to control industrial sources of contamination affecting clean air. The duty to regulate and control applies both when air pollution is a consequence of the industrial activities of a single source and when it is generated as a result of complex activities of multiple sources, including by organized criminal groups.⁷²

39. The obligation is to prevent the risk, thus avoiding the materialization of significant or irreversible human rights or environmental harms. In air pollution cases, courts have analysed real and imminent risks, understood the genuine and sufficiently ascertainable threat, and determined that imminent refers to proximity, considering physical conditions and time.⁷³

40. The Inter-American Court on Human Rights, in *La Oroya v. Peru*, recognized that a State can be responsible for the creation of risks to human rights and thus be internationally responsible for violations. Moreover, victims do not have to prove a direct link between alleged health impacts and the exposure to contaminants when: (a) significant risks to human health posed by pollutants have been proven; (b) it has been demonstrated that persons have been exposed to such pollutants under conditions that endangered their health; and (c) the State has breached its obligation to prevent environmental pollution.⁷⁴

41. Similarly, the European Court on Human Rights, in *Cannavacciuolo and others v. Italy*, concluded that when there is exposure to a sufficiently serious, genuine and ascertainable risk to life, the States have the duty to act. The Court stated that it “does not consider it necessary or appropriate to require that the applicants demonstrate a proven link between the exposure to an identifiable type of pollution or even harmful substance and the onset of a specific life-threatening illness or death as a result of it”.⁷⁵

⁷⁰ *Obligations of States in respect of Climate Change, Advisory Opinion*, paras. 132–134, 137, 271–274 and 440.

⁷¹ *Ibid.*, paras. 275, 276 and 282.

⁷² European Court of Human Rights, *Cannavacciuolo and others v. Italy*, Application No. 51567/14 and others, Judgment, 30 January 2025, para. 384; Inter-American Court of Human Rights, *La Oroya v. Peru*, Judgment, 27 November 2023, paras. 119 and 121; Inter-American Court of Human Rights, *Advisory Opinion AO-32/25*, para. 348.

⁷³ European Court of Human Rights, *Cannavacciuolo and others v. Italy*, para. 377.

⁷⁴ *La Oroya v. Peru*, para. 204.

⁷⁵ Para. 390.

1. Effective measures: regulate, control, monitor and enforce

42. Effective measures to guarantee healthy air, taking into consideration human health and the environment, include legislative, judicial and administrative measures preventing violations, enforcement measures for responding to non-compliance, and remediation mechanisms. The lack of effective prevention of risks posed by air pollution and ecological degradation can violate the State's obligation to respect human rights.⁷⁶ Measures must provide effective deterrence against threats to the right to life, and be timely, appropriate and consistent.⁷⁷ Specifically related to air pollution, States must refrain from contributing to such pollution, given its impacts on human health,⁷⁸ and must control and monitor public and private actors in that regard.⁷⁹

43. Moreover, as confirmed by the International Court of Justice, enforcement and monitoring mechanisms are indispensable to ensuring that public and private operators within a State's jurisdiction comply with regulatory standards. Additionally, State responsibility may arise from fossil fuel production or consumption and the granting of licences or subsidies, owing to the direct link to greenhouse gas emissions and the resulting failure to protect the climate system,⁸⁰ which also aggravates air pollution.

44. Prolonged inaction in controlling pollution also constitutes a violation of human rights, as concluded by the European Court of Human Rights in *Cordella and others v. Italy*, where the Court found that, with regard to toxic emissions from a steel plant, the State's inaction in preventing environmental harm had violated the right to private and family life.⁸¹

45. Failure to monitor pollution and inform the public violates the rights of affected populations, as concluded by the Inter-American Court of Human Rights and the European Court of Human Rights.⁸² Effective measures should reflect the best available science and meet the criteria of availability, accessibility, sustainability, quality and adaptability, as well as participation in international cooperation. Additionally, scientific uncertainty cannot justify inaction as, when risks of significant or irreversible harm exist, States must act promptly and effectively under the precautionary principle.

46. Several courts have found that States have failed to fulfil their obligation to prevent significant risks to human rights from air pollution. In *Trustees for the time-being of Groundwork Trust and another v. Minister of Environmental Affairs and others* (the "Deadly Air" case),⁸³ the High Court of South Africa held that delays in regulatory action violated the constitutional right to an environment not harmful to health, owing to the poor air quality in the Highveld Priority Area. In a judgment regarding the postponement of the next phase of low-emission zone restrictions in the Brussels region, the Belgian Constitutional Court similarly concluded that delaying low-emission zone implementation was inconsistent with environmental and health protection obligations, particularly affecting vulnerable

⁷⁶ European Court of Human Rights, *Verein Klimaseniorinnen Schweiz and others v. Switzerland*, Application No. 53600/20, Judgment, 9 April 2024; African Charter on Human and Peoples' Rights, art. 24; and African Commission on Human and Peoples' Rights, *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, communication No. 155/96, para. 52.

⁷⁷ European Court of Human Rights, *Cannavacciuolo and others v. Italy*, paras. 380 and 381.

⁷⁸ Committee on Economic, Social and Cultural Rights, general comment No. 14 (2000); and Inter-American Court of Human Rights, *La Oroya v. Peru*, para. 133.

⁷⁹ European Court of Human Rights, *Cannavacciuolo and others v. Italy*, para. 431; Inter-American Court of Human Rights, *La Oroya v. Peru*, para. 156; and Inter-American Court of Human Rights, Advisory Opinion AO-32/25, paras. 347–351.

⁸⁰ International Court of Justice, *Obligations of States in respect of Climate Change*, para. 282 and 427.

⁸¹ Application Nos. 54414/13 and 54264/15, Judgment, 24 January 2019.

⁸² Inter-American Court of Human Rights, *La Oroya v. Peru*, paras. 120, 121, 127 and 176; and European Court of Human Rights, *Cannavacciuolo v. Italy*, para. 377–382.

⁸³ Case No 39724/2019, Judgment, 18 March 2022.

populations such as children.⁸⁴ In *Koalisi Ibu Kota v. Indonesia*,⁸⁵ the Jakarta High Court concluded that public officials had breached their duty to protect citizens from environmental harm by not regulating and enforcing air quality standards, monitoring pollution sources effectively, or coordinating emission-reduction actions.

2. **Obligation to undertake environmental, social and human rights impact assessment processes, including with regard to health impacts**

47. Preventing human rights violations and significant environmental harms requires effective planning and undertaking comprehensive, integrated and prior environmental, social and human rights impact assessments to identify risks, and ensuring that all necessary measures are taken to avoid them. Only when this is not possible should mitigation measures be identified, as well as remediation actions in cases where the environment or human rights are violated. In that regard, the Special Rapporteur refers to her report on environmental, social and human rights impact assessments⁸⁶ and highlights the importance of implementing comprehensive assessments for projects that might affect air quality. These assessments must also take into consideration health impacts, especially among persons in more vulnerable situations.

48. The International Court of Justice has reiterated the obligation to undertake environmental, social and human rights impact assessments for the protection of the environment and the climate system and in the context of activities posing significant risks of adverse transboundary impacts.⁸⁷ Recently, the European Court of Human Rights concluded that States have the obligation to conduct an “adequate, timely and comprehensive environmental impact assessment in good faith and based on best available science” before authorizing activities that might be harmful to the right for individuals to have effective protection from serious effects of climate change on affecting their life, health, well-being and quality of life.⁸⁸ In *African Climate Alliance and others v. Minister of Mineral Resources and Energy and others*, the High Court of South Africa held that failing to evaluate environmental risks in the procurement of new coal-fired capacity was unconstitutional, especially given the impacts on children and future generations.⁸⁹

B. **Businesses must also prevent risks from air pollution**

49. Businesses are major sources of air pollution globally and must respect human rights across their operations. Under the Guiding Principles on Business and Human Rights, businesses must: avoid causing or contributing to harm (principle 13), conduct ongoing human rights due diligence (principles 17–21), and provide remediation when violations have occurred (principle 22). This framework applies directly to air quality, given the significant health and environmental harm linked to business activities. The jurisprudence of the Inter-American Court of Human Rights in the context of air pollution and its impacts on human rights has reinforced that businesses must respect human rights in their operations and take immediate, effective measures to prevent and mitigate risks that their activities cause.⁹⁰

50. States must require companies to carry out due diligence processes in relation to human rights and the environment, particularly for operators emitting air pollutants. Due diligence includes strict compliance with environmental licensing conditions, such as

⁸⁴ Judgment No. 115/2025, Role No. 8487, 11 September 2025. Available at <https://fr.const-court.be/public/f/2025/2025-115f.pdf> (in French).

⁸⁵ Available at <https://putusan3.mahkamahagung.go.id/direktori/putusan/zaec2b0d732a5e24a30f313033353330.html> (in Indonesian).

⁸⁶ A/80/187.

⁸⁷ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, I.C.J. Reports 2010, p. 14 and *Obligations of States in respect of Climate Change*, paras. 272 and 297.

⁸⁸ European Court of Human Rights, *Case of Greenpeace Nordic and others v. Norway*, Application No. 34068/21, Judgment, 28 October 2025, para. 318.

⁸⁹ Case No 56907/2021, Judgment, 4 December 2024, paras. 22 and 25.

⁹⁰ *La Oroya v. Peru*, para. 114.

emission limits, continuous monitoring obligations, periodic reporting and the adoption of effective pollution control measures.

51. Stringent due diligence entails differentiated obligations for high-emitting businesses. Those who contribute most to pollution must bear greater burdens, which may include higher taxation, stricter regulatory standards, mandatory participation in just transition initiatives or targeted investments in mitigation and adaptation measures.

V. Viable solutions to overcome challenges and breathe clean air

52. Economic growth is still prioritized over human rights and the environment, and reflected in unsustainable economic and development models, threatening the effective implementation of the human right to a clean, healthy and sustainable environment, which includes breathing clean air.⁹¹ This is evidenced by air pollution drivers, including transportation, industries, infrastructure development and housing. Rapid, unsustainable urbanization, along with inadequate planning, results in hazardous levels of air pollution.

53. Undue influence from sectors and businesses linked to air pollution drivers continues to delay regulations that would prioritize health over profit and economic growth, as highlighted in consultations and contributions received. Business pressure, diplomatic lobbying and investor-State dispute settlements often delay or weaken environmental measures.

54. Examples of prioritization of economic growth over protecting health include:

(a) Delhi, India, where the vehicular fleet amounts to 12 million units, while 7 out of 10 residents rely on public transit, bicycles or walking.⁹² Meanwhile, for example, in November 2024, all schools in Delhi closed and switched to online classes due to severe air pollution.⁹³ Studies recommend both short- and long-term actions to restrict vehicles and reduce the number of trips through effective urban planning;⁹⁴

(b) Detroit, United States, where members of communities near the Downriver industrial corridor live among highways, refineries and steel plants and in the vicinity of one of the region's largest ports. Port operations generate roughly 30,000 metric tons of carbon dioxide annually, along with nitrogen oxides, sulfur dioxide and particulate matter contributing to elevated rates of asthma and cardiovascular disease. The implementation of control measures to prevent health and environmental damage from air pollution is still inadequate. The city partnered with Just Air for the installation of low-cost air quality monitors along the Detroit Port Corridor in 2024. This led to the identification of the major contributors to localized pollution and additional results are anticipated.

55. Implementing measures to tackle air pollution can be less expensive than expected, and costs of inaction can be considerably higher. In 2019, air pollution cost \$8.1 trillion globally, owing to the health cost of mortality and morbidity from PM_{2.5} pollution.⁹⁵ In Indonesia alone, annual air pollution costs exceed \$27 billion, driven by healthcare expenses, productivity losses and premature deaths, compared with the roughly \$7.5 billion in public and private investment required to meet national reduction targets by 2030.⁹⁶ World Bank analysis shows that it is feasible and affordable to implement clean air policies that would halve the number of people exposed to PM_{2.5} concentrations above 25 µg/m³ globally by 2040.⁹⁷

⁹¹ See [A/79/270](#).

⁹² Submission from Chetan Bhattacharji.

⁹³ Submission from Our Kids' Climate.

⁹⁴ See <https://www.intechopen.com/chapters/86023>.

⁹⁵ See <https://ceh.unicef.org/events-and-resources/knowledge-library/global-health-cost-pm25-air-pollution-case-action-beyond>.

⁹⁶ Submission from Bicara Udara.

⁹⁷ See <https://documents1.worldbank.org/curated/en/099032625132535486/pdf/P502230-d16d0858-2e18-41df-a7a6-f1188121ac83.pdf>.

56. Yet allocation of financial resources still flows disproportionately to sectors contributing to air pollution, such as the fossil fuel sector, notwithstanding commitments made to eliminate fossil fuel subsidies, for example those made by the Group of 20 in 2009 and the Group of Seven in 2016.⁹⁸ Meanwhile air-improving actions remain underfunded and avoidable healthcare costs continue rising. Between 2018 and 2024, an average of around \$600 billion was spent globally per year subsidizing fossil fuels, and only \$3.16 billion was spent on outdoor air pollution control.⁹⁹

57. Investments in reducing air pollution generate tangible and quick health and economic improvements. It is estimated that, in Ethiopia, some such actions have a return on investment of seven times.¹⁰⁰ Over 70 per cent of low-income households benefiting from the Ujjwala clean-cooking subsidy plan in India reported health improvements.¹⁰¹ During significant periods of deteriorating air quality, the Haze Subsidy Scheme in Singapore provides affordable treatment.¹⁰² Ulaanbaatar has shifted from raw coal to cleaner fuels, achieving a 51 per cent reduction in winter PM_{2.5} levels (2019/20 compared to 2016/17), following Asian Development Bank-supported clean energy investments in Mongolia.¹⁰³

A. Pathways to include health into air quality frameworks and policies

58. The clear correlation between air pollution and health impacts underscores the need and opportunity for air quality and health policies to complement and inform each other. However, legal frameworks on air pollution remain primarily technical, often developed without adequate health-sector input or considering health risks. Consequently, contingency and action plans often focus only on environmental parameters. A fragmented approach across all policies, including energy, transport, housing,¹⁰⁴ environment and climate, along with a lack of interdisciplinary, cross-sectoral collaboration,¹⁰⁵ hinders the ability to analyse long-term exposure and health impacts.

59. For example, during the 2023 El Niño pollution crisis in Greater Jakarta, authorities acknowledged health risks, but issued only generic recommendations, such as wearing masks or working remotely.¹⁰⁶ Similarly, in Brazil, contingency measures for high-polluting events, like wildfires, in the Amazon region, rarely include public health guidance or standardized health thresholds.¹⁰⁷

60. Correcting this gap includes incorporating sociodemographic indicators (age, gender)¹⁰⁸ and health risk criteria (morbidity, mortality or exposure limits) within environmental and air quality frameworks. Some States are starting to use specialized tools to incorporate health into environmental policies. Colombia and Uzbekistan use the WHO Air Quality software (AirQ+) to quantify the health burden and impact of air pollution, to complement their own monitoring and to inform their policies and programmes.¹⁰⁹

61. Health impact assessments are another useful tool. Estonia now includes them in environmental permit processes in industrial areas, while Japan is working to integrate health into its environmental impact assessments.¹¹⁰ The tool is intended for planning purposes that extend beyond the scope of project-level developments, combining pollution data with health

⁹⁸ See https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/03/oecd-companion-to-the-inventory-of-support-measures-for-fossil-fuels-2021_50960d6b/e670c620-en.pdf and <https://www.mofa.go.jp/files/000160266.pdf>.

⁹⁹ Submission from Our Kids' Climate.

¹⁰⁰ See <https://www.undp.org/ethiopia/publications/investment-case-air-pollution-reduction-ethiopia>.

¹⁰¹ See <https://actascientific.com/ASWH/pdf/ASWH-04-0411.pdf>.

¹⁰² Submission from Singapore.

¹⁰³ Submission from World Heart Federation.

¹⁰⁴ Submission from European Respiratory Society.

¹⁰⁵ Submissions from Kirigo Wachira and Nurses across Borders.

¹⁰⁶ See https://ditjenbinaadwil.kemendagri.go.id/download/file/Inmendagri_2_tahun_2023.pdf (in Indonesian), as cited in submission from Bicara Udara.

¹⁰⁷ Submission from Respira Amazônia.

¹⁰⁸ Submission from Global Youth Strategy.

¹⁰⁹ Submissions from Colombia and Uzbekistan.

¹¹⁰ Submission from Health and Global Policy Institute.

statistics to estimate effects, such as premature deaths and hospitalizations, especially related to PM_{2.5}, with a view to demonstrating the correlation between air quality and public health, and acting on it.¹¹¹ Health, as a cross-cutting issue, must be considered in order to achieve the proper implementation of environmental, social and human rights impact assessments and close existing gaps.¹¹²

62. Epidemiological studies provide solid evidence for regulations. Japan conducted epidemiological studies in the 1970s to control vehicular emissions, especially to protect children.¹¹³ The strategic horizontal programmes in Asturias, Spain, determine the conduct of epidemiological studies in priority areas to detect health and mental health effects and establish a specific system of epidemiological surveillance in high-sensitivity zones, including school areas, thereby enabling more targeted planning.¹¹⁴

63. Transboundary cooperation also strengthens health-environment integration and can help in fulfilling the obligation to cooperate. Under the ASEAN Agreement on Transboundary Haze Pollution, the ASEAN Specialized Meteorological Centre¹¹⁵ is mandated to monitor, assess and issue warnings on weather, climate, fires and transboundary haze. The Lao People's Democratic Republic, Myanmar and Thailand work together under the CLEAR Sky Strategy to improve the prevention of transboundary haze.¹¹⁶ Implementation of the Convention on Long-range Transboundary Air Pollution in Europe has been strengthened through increased collaboration with external organizations.¹¹⁷ The WHO Second Global Conference on Air Pollution and Health reflected growing commitments around the world; 79 cities, regions and countries are members of the BreatheLife Network.¹¹⁸ Implementing these commitments should be prioritized.

B. Air quality regulations: from rigidity to action

64. Air pollution is not merely an environmental concern, but a critical issue that must be addressed through the lenses of human rights, health equity and strengthened social protection systems.¹¹⁹ Ghana, in its 2018 short-lived climate pollutants action plan and its 2025 air quality management regulations, has recognized clean air as a human right and emphasized health co-benefits.¹²⁰

65. Only 96 of 252 evaluated countries and territories have adopted national particle matter air quality standards, and a third of those standards are weaker than the WHO interim target of 15 µg/m³.¹²¹ Some countries still lack specialized air quality legislation. Bosnia and Herzegovina, Brazil, India, Peru, the Philippines, Türkiye and the United Arab Emirates have legal limits above WHO guidelines for key pollutants¹²² (PM_{2.5}, PM₁₀, ozone, sulfur dioxide and nitrogen oxides, including nitrogen dioxide), and 55 per cent of countries routinely allow air quality standards to be exceeded.¹²³ In Mexico, only 1 of 52 cities evaluated met the PM_{2.5} health protection limits in 2022.¹²⁴

66. Systematic non-compliance and inadequate enforcement allow pollution to worsen. India required 17 categories of hazardous industries to install online continuous emissions

¹¹¹ Submission from Estonia.

¹¹² See [A/80/187](#).

¹¹³ See <https://doi.org/10.1265/ehpm.25-00020>.

¹¹⁴ Submission from Instituto Alana and others.

¹¹⁵ See <https://asmc.asean.org/home/>.

¹¹⁶ Submission from Myanmar.

¹¹⁷ See https://doi.org/10.1163/9789004684089_007.

¹¹⁸ See <https://breathelife2030.org/breathelife-cities/>.

¹¹⁹ Submission from the Republic of Korea.

¹²⁰ Submission from Lancet Countdown on Health and Climate Change.

¹²¹ Submission from Air Quality Life Index, Energy Policy Institute at the University of Chicago.

¹²² Submissions from Instituto Alana and others; Patricia Iturregui and others; and University of the Philippines – Center for Air Research in Urban Environments (UP-CARE).

¹²³ See https://uniatf.who.int/docs/librariesprovider22/default-document-library/raq-gaapl.pdf?sfvrsn=e3c580f9_1.

¹²⁴ See <https://sinaica.inecc.gob.mx/archivo/informes/Informe2022.pdf> (in Spanish), p. 35.

monitoring systems, yet it is difficult to gain access to compliance data.¹²⁵ Since 2018, the United States has required 13 petrochemical facilities to install monitors; only 4 have provided enough data for analysis, and 2, including 1 in “Cancer Alley”, exceeded benzene regulation limits.¹²⁶ In the Islamic Republic of Iran, studies showed that inadequate and ineffective supervision undermines the country’s Clean Air Act.¹²⁷

67. Examples of adequate policies improving health include the implementation in China of restrictions on factory emissions and travel to improve air quality ahead of the Olympics in Beijing, resulting in a 58 per cent reduction in asthma-related physician visits and reduced cardiovascular mortality within just two months. Nationally, PM_{2.5}-related diseases fell 30 per cent between 2013 and 2017, due to clean air policies, and by 2024, national PM_{2.5} averaged 29.3 µg/m³, a 36 per cent drop from 2015.¹²⁸

68. The response by Japan to the Yokkaichi asthma event, a major pollution-related epidemic of respiratory diseases, illustrates an achievable health-based system (conducting epidemiological studies) and the “polluter-pays principle”, holding those who cause pollution accountable for the costs of remediation and restoration and victim compensation for medical and livelihood assistance.¹²⁹ Under the Act on Compensation for Pollution-Related Health Damage (Act No. 111 of 1973), victims of extreme air pollution received medical coverage, disability compensation, child allowances, and in the case of death, funeral service fees and compensation were provided to surviving families.

69. The Environmental Justice Law of the State of New Jersey, in the United States, restricts projects contributing to environmental and health stressors in “overburdened communities” unless a compelling public interest is proven; cost cannot be the determining factor, and approval requires the adoption of the most emission-reducing measures available.¹³⁰

70. The London Ultra Low Emission Zone, in the United Kingdom of Great Britain and Northern Ireland, improved air quality at 99 per cent of monitoring sites.¹³¹ In September 2025, London met the legal nitrogen dioxide limits nearly 200 years earlier than projected.¹³² Children in London had faster lung growth following this policy, as compared to those in Luton, which lacked similar programmes.¹³³ In 1991, Kathmandu started to replace diesel three-wheelers with electric ones. As of 2025, there are 700 electric three-wheelers operating with no government subsidies, serving mainly women, children and low-income groups. In Nigeria, cooking on ethanol stoves was associated with improved infant birth weight, gestational age at delivery and perinatal mortality compared to cooking with open fire.¹³⁴

71. Policies of this nature can be both preventive and provide redress measures. These examples demonstrate a clear path to achieve long-lasting results: air quality regulations must set safe limits on pollutants in relation to human and environmental health, through epidemiological studies and health impact assessments; the regulations must be enforced through health- and human rights-based actions prioritizing more vulnerable populations and include stringent due diligence standards regarding polluting industries and projects; policies such as ultralow emission zones must be implemented, and reparations based on victim compensation and the polluter-pays principle must be integrated into the regulations.

¹²⁵ See <https://sansad.in/getFile/annex/257/AU508.pdf?source=pqars>.

¹²⁶ Submission from Human Rights Watch.

¹²⁷ See <https://doi.org/10.22034/envj.2024.444120.1358> (in Persian).

¹²⁸ Submissions from China; NCD Alliance; and Xi’an Jiaotong University Health Science Centre.

¹²⁹ Submission from Health and Global Policy Institute.

¹³⁰ Submission from Earthjustice.

¹³¹ See <https://www.london.gov.uk/media-centre/mayors-press-releases/new-evidence-reveals-all-londoners-are-now-breathing-cleaner-air-following-first-year-expanded-ultra>.

¹³² See <https://www.london.gov.uk/london-meets-legal-limits-toxic-no2-pollution-first-time-almost-200-years-earlier-predicted>.

¹³³ See <https://doi.org/10.1093/eurpub/ckaf161.486>.

¹³⁴ Submission from NCD Alliance.

C Monitoring: deficiencies and good practices

72. Effective monitoring provides policymakers and other stakeholders with comprehensive data and valuable insights to ensure informed decision-making. In Europe, 95 per cent of countries legally require monitoring; in the Americas, the figure is 53 per cent; among Eastern Mediterranean countries, 50 per cent; and in Africa, 30 per cent, where only 24 of 54 countries have the capacity to monitor air quality. Just 3 out of 10 States in Southeast Asia have ambient air quality monitoring stations that fulfil population-weighted criteria.¹³⁵ Only 7 per cent have indoor air quality standards.¹³⁶

73. Most monitoring stations are concentrated in cities, excluding rural or inaccessible areas, increasing inequalities and information gaps especially in relation to marginalized communities. In Latin America and the Caribbean, only 117 cities in 17 of the 33 countries have official information available on ground-level air pollutants.¹³⁷

74. While most systems track PM_{2.5}, PM₁₀, nitrogen dioxide, sulfur dioxide and ozone, monitoring must include pollutants posing risks to health, considering sources and factors such as climate and extreme weather events. Short-lived climate pollutants, such as black carbon and methane, should also be monitored.

75. With regard to low-cost sensor data for governmental air monitoring networks, concerns about data accuracy and reliability remain,¹³⁸ however these data are increasingly used to complement and cross-reference official monitoring, mostly where reference grade monitors are not available. Low-cost sensors should be calibrated with reference grade monitors when possible. In difficult-to-access areas, such as the Amazon forests in Brazil, low-cost monitors have been installed to monitor smoke and issue public health alerts during severe fire episodes.¹³⁹ The air quality network in Nairobi includes two reference stations and 87 active low-cost sensors posted in strategic locations, including informal settlements, industrial areas and vehicular transit zones.¹⁴⁰ Burundi, Singapore and Thailand¹⁴¹ have also included low-cost sensors as part of their air-quality monitoring networks.

76. For some communities, citizen-led monitoring initiatives using low-cost sensors are the main or only source of information regarding air pollution. The City of Pasig, in the Philippines, partnered with the University of Philippines Center for Air Research in Urban Environments, launching a community-based low-cost air quality monitoring network in 2023, due to a long-standing monitoring gap, as there is no government-operated reference station within the city limits.¹⁴² Boston Public Schools, in the United States, installed a district-wide network of 4,400 sensors to cover classrooms, main hallways and nurse's offices in over 120 schools. Data from those sensors is made publicly available to increase transparency and drive evidence-based decision-making.¹⁴³

D. Access to air quality information, and raising awareness

77. To fulfil the obligation of States to provide timely and accessible information,¹⁴⁴ air quality data must be updated, comprehensive, reliable, disaggregated, open, user-friendly and real-time. While 61 per cent of countries recognize the human right to access air-quality information, only 39 per cent impose a legal duty on the State to proactively disseminate the information. Worldwide, over 5 billion people still lack access to air pollution information.¹⁴⁵

¹³⁵ Submissions from World Heart Federation and Sunway Centre for Planetary Health.

¹³⁶ Submission from Brown University Pandemic Center and others.

¹³⁷ Submission from Asociación Interamericana para la Defensa del Ambiente.

¹³⁸ Submission from Ireland.

¹³⁹ Submission from Coalizão Respira Amazônia.

¹⁴⁰ Submission from Gillian Onyango.

¹⁴¹ Submissions from Burundi; Singapore; and Sunway Centre for Planetary Health.

¹⁴² Submission from University of the Philippines – Center for Air Research in Urban Environments.

¹⁴³ Submission from Brown University Pandemic Center and Air Club.

¹⁴⁴ See A/HRC/40/55.

¹⁴⁵ See <https://aqli.epic.uchicago.edu/files/Report%20-%20English%20Global%20View.pdf>.

78. Obstacles include outdated, and inconsistent publication of, data; a lack of public historical records; difficult-to-navigate online platforms; and complex information without interpretation for the public. Disaggregated information, socioeconomic indicators, areas of monitoring and relevant context aspects, such as variations among neighbourhoods, are frequently absent, especially in low- and middle-income countries, for example in Bangladesh, Brazil, India, Indonesia and Türkiye.¹⁴⁶

79. Limited awareness among the population of the consequences of air pollution can impede the acceptance of and adherence to measures intended to protect health and the environment, such as warnings to avoid outdoor activities or to limit vehicular traffic.¹⁴⁷ Uneven generation of data can produce defective action plans and warning systems driven by incomplete information. Some States have yet to implement warning systems; others have limited ones.

80. The disclosure of air pollution information should also be a socially inclusive¹⁴⁸ and context-dependent process. Several States,¹⁴⁹ United Nations entities¹⁵⁰ and civil society organizations have launched digital platforms in order to disseminate this information, increase awareness and contribute to improving air quality measures, constituting interesting examples to learn from. Citizen engagement has been a catalyst for improvement around the world. Civil society groups in Poland helped make air quality data accessible, which led to Krakow issuing, in 2016, a ban on solid fuels for household heating.¹⁵¹

81. The Lancet Countdown on Health and Climate Change connects academic, governmental and citizen-led air monitoring initiatives, providing multi-annual data for indicators on wildfires, sand, dust, ambient and household air pollution, and agricultural emissions at the country level, with further downscaling possible in some cases. OpenAQ¹⁵² is an open-source, open-access database of outdoor air quality measurements. It hosts government-measured and research-grade data from locations around the world, as well as air sensor data.

82. In Spain, AirQ+ serves as the primary risk communication system: it translates pollutant concentrations into a colour code and accompanies the code with specific health recommendations for the general population and more vulnerable groups.¹⁵³

VI. Conclusions and recommendations

83. **Air pollution's severe impacts on people's rights and well-being are undeniable and scientifically proven, and are particularly evident among persons living in low- and middle-income countries and in marginalized situations. Existing risks are exacerbated for more vulnerable people, including children, pregnant people, older persons and persons with pre-existing health conditions.**

84. **Tackling the root causes of air pollution requires urgent preventive and corrective action to address transboundary and localized sources with short and long-term action. Because geography and meteorology influence contaminant transport and deposition, States must define air quality basins or districts among and within which to prioritize actions, bringing rapid relief for the most vulnerable populations.**

85. **States must act decisively to address cumulative pollution sources, prioritize areas with persistent non-compliance, ensuring transparency and public oversight. Without consistent implementation and enforcement, air quality frameworks and efforts risk becoming symbolic rather than delivering the real improvements needed.**

¹⁴⁶ Submissions from Global Youth Strategy; Chetan Bhattacharji; and Bicara Udara.

¹⁴⁷ Submission from Air Quality Life Index, Energy Policy Institute at the University of Chicago.

¹⁴⁸ Submission from Imperial College London.

¹⁴⁹ For example, Colombia, Estonia, Ireland, Japan, Jordan, Mexico, Myanmar, Romania, Singapore, Spain and Uzbekistan.

¹⁵⁰ United Nations Environment Programme and WHO.

¹⁵¹ Submission from Air Quality Life Index, Energy Policy Institute at the University of Chicago.

¹⁵² See <https://openaq.org/>.

¹⁵³ Submission from Spain.

The private sector must reduce emissions to protect communities and workers, making clean air possible.

86. The former Special Rapporteur provided recommendations on clean air that remain urgent today.¹⁵⁴ To this end, and considering recent advances, the current Special Rapporteur underscores that States must prioritize the additional recommendations below towards clean air and protecting public health, which complement and build upon past recommendations. States must:

(a) Ensure that air quality policies, laws, regulations and actions incorporate a human health-based approach, recognizing the severe risk and harm air pollution poses to health, prioritizing effective actions with an intersectional perspective that respond to the needs of the most vulnerable people and ensure their protection, including:

(i) Undertaking and effectively enforcing air pollution action plans that guarantee health protection, including adequate warning systems and protocols for when air quality reaches dangerous levels, considering in particular populations most at risk;

(ii) Establishing emissions limits for each contaminant and facility that prioritize human health protection and ensure that cumulative emissions from multiple facilities will not cause air quality violations and health impacts;

(iii) To protect health, enacting a presumption against permitting new contaminating facilities in already overburdened communities that do not meet air quality standards, regardless of the purported economic benefit. Only exceptionally permits for facilities in such communities should be allowed, with stricter conditions;

(b) Enact and regularly update air quality standards and progressively strengthen and avoid regressions, based on best available science, including WHO guidelines and considering particularly vulnerable populations. Implementation schedules should be aggressive and seek short-term, real improvements reducing health risks and avoiding repetition;

(c) Establish and regularly update effective, best science-based, adequately funded air quality and emissions monitoring programmes that:

(i) Provide reliable, comprehensive and continuous air quality monitoring (24-hour, year-round) through a combination of government, private sector and public monitoring networks, including innovative ways of incorporating low-cost monitoring and satellite data to allow rapid identification of high-priority problems;

(ii) Monitor all contaminants of concern based on known sources, and local conditions, adding monitoring for specific hazardous and toxic contaminants in high-risks areas;

(iii) Require continuous monitoring of stationary source (stack) emissions for all regulated and toxic pollutants and especially PM_{2.5};

(iv) Closely monitor key industries such as fossil fuel production, refining and transport; metal processing and smelting; electricity generation; chemical, plastic, cement or metal manufacturing; brick kilns; waste management; and data centres;

(v) Monitor fence-line air quality at industrial sites, ports, airports, distribution centres and major transit routes, especially when near communities;

¹⁵⁴ [A/HRC/40/55](#).

- (vi) **Require air quality reports showing daily, quarterly and annual averages, along with maximum peak concentrations of all contaminants. This includes up-to-date air quality monitoring maps disclosing disproportionately affected areas;**
- (vii) **Require regular reporting of all toxic substances released by industry, showing total amounts by substance, location and facility;**
- (viii) **Make all air quality, emissions and toxic release reporting data publicly available upon receipt, electronically and free of charge;**
- (ix) **Fill data gaps with a focus on public health, considering differentiated risk situations and particularly vulnerable populations. Review the data considering both long-term persistent and short-term acute health risks and implement emergency protocols in case of exceedances;**
- (d) **Strengthen the institutional capacity-building required to protect air quality, prioritizing coordination between health and environment sectors;**
- (e) **Require environmental, social and human rights impact assessments in licensing processes for all major polluting activities, requiring thorough assessment of health and air pollution impacts; environmental licensing and permitting processes must be based on robust baseline data, rigorous air quality prediction and analytical methods, and consider health and environmental risks of hazardous air pollutants. Assessments that inaccurately predict harms of air pollution over time should be avoided, as should processes granting licences based on evaluations that do not consider variations of the project operation over time, worst-case scenarios, cumulative industrial growth and adverse climate conditions;**
- (f) **Effectively control main drivers of air pollution through enforcement that stops and prevents harms, and to that end:**
 - (i) **Charge costs of oversight and enforcement to polluters through: proportionate project application fees covering all costs of review processes, including hiring technical experts; and operation fees that fully fund permanent air quality enforcement and oversight programmes, including monitoring data analyses, site inspections and the issuance of fines and penalties;**
 - (ii) **Establish fines and penalties that create real economic disincentives for violations. Fines should be automatic, cumulative for each day of violation, dependent on air contaminant and subject to increases for repeated violations, culminating in forced closures in cases of severe noncompliance;**
 - (iii) **Place the burden of proof on the polluter by requiring injunctive relief in the form of payment of fees and penalties for continued operations, limiting the time frames;**
- (g) **Ensure that, when identifiable harmful pollution poses serious health risks, victims and potential victims are not required to prove direct causation between alleged health impacts and exposure to it;**
- (h) **Proactively generate and disseminate timely, updated and easily understandable information about how air quality threatens populations, especially more vulnerable groups;**
- (i) **Explain information about acute air pollution, corrective actions and health protections to combat misinformation and increase compliance when policies may otherwise be perceived as generating inconvenience or unnecessary expense;**
- (j) **Strengthen international cooperation by increasing financial support for clean air and human rights initiatives and sharing and supporting replication of successful actions for air quality improvement.**

87. City and subnational governments should prioritize actions to improve air pollution and health, including by:

- (a) Limiting new fossil fuel production and mandating strict control of air pollution at existing facilities, including minimum distances to populated centres, schools or homes and requirements for capture and use of methane and other greenhouse gases;
- (b) Eliminating subsidies and other economic incentives for the fossil fuel sector, and shifting support to just transition and healthy air alternatives such as increased electrification, local distributed renewable energy generation and storage options;
- (c) Strengthening fuel efficiency and quality standards and vehicle exhaust controls, and establishing programmes to retire and prohibit superpolluter vehicles and control ship emissions and truck pollution at ports and other transport and delivering centres near communities;
- (d) Developing efficient, sustainable and affordable “zero emissions” public transportation systems and improving traffic patterns to reduce congestion and eliminate contamination hotspots in marginalized communities;
- (e) Strictly regulating and enforcing products contributing to air pollution, including chemicals, paints and fireworks, and requiring progressive reduction of the use of products and processes that generate toxic air releases;
- (f) Requiring strategic impact assessments and environmental, social and human rights impact assessments – including health assessments – for urban planning and municipal project approval to reduce air pollution and build green cities;
- (g) Strengthening home and commercial building codes and construction standards for more efficient heating and cooling;
- (h) Protecting and expanding green spaces and increasing tree coverage to improve natural air filtering and shading that diminishes air pollution;
- (i) Adopting and enforcing strong measures to prevent forest fires, agricultural burning and waste burning, and disincentivizing the use of biomass for heating and cooking by subsidizing cleaner fuels;
- (j) Improving waste collection and management, especially minimizing emissions from incineration, and requiring the capture and use of methane released at landfills;
- (k) Ensuring access to information, public participation and access to justice to all, especially those in marginalized situations, by improving and implementing regulations.

88. Businesses have the obligation to prevent, avoid and stop worsening air pollution and subsequent health risks, especially in relation to children, workers and other persons in vulnerable situations. Businesses must:

- (a) Comply with emissions limits and reduce emissions, if operating in areas that do not meet air quality standards, proactively contributing to air quality improvement; and abstain from interfering with the improvement and enforcement of standards seeking to protect human rights;
- (b) Share reliable and comprehensive information regarding contaminants and activities related to their operations that might be contributing to air pollution;
- (c) Protect workers from unhealthy air by installing appropriate technologies and personal protective equipment and ensuring healthcare and social security;
- (d) Abstain from undue influence or disinformation or misinformation campaigns concerning air quality and its relation to human rights, human health and the right to a healthy environment.

Certificate of Annexure

No. VID1357 of 2025

Federal Court of Australia

District Registry: Victoria

Division: General

FRIENDS OF AUSTRALIAN ROCK ART INC

Applicant

MINISTER FOR THE ENVIRONMENT AND WATER AND ANOTHER

Respondents

This is the annexure marked **DB-9** produced and shown to David Burke at the time of affirming his affidavit on 27 April 2026.



.....
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**Promotion and protection of all human rights, civil,
political, economic, social and cultural rights,
including the right to development**

Visit to Singapore

Report of the Special Rapporteur on the human right to a clean, healthy and sustainable environment, Astrid Puentes Riaño*

Summary

The Special Rapporteur on the human right to a clean, healthy and sustainable environment, Astrid Puentes Riaño, visited Singapore from 14 to 23 May 2025 to examine the implementation of the right to a clean, healthy and sustainable environment, identify good practices and investigate environmental challenges. Aware of its limited land and natural resources, Singapore has shown a growing commitment to environmental sustainability. It has significant opportunities to leverage its leading role in marine governance, trade and technology. The recommendations made by the Special Rapporteur include the need to recognize the right to a healthy environment, mainstream human rights- and ecosystem-based approaches, and increase the protection of populations in vulnerable situations.

* The summary of the report is being circulated in all official languages. The report itself, which is annexed to the summary, is being circulated in the language of submission only.



Annex

Report of the Special Rapporteur on the human right to a clean, healthy and sustainable environment, Astrid Puentes Riaño, on her visit to Singapore

I. Introduction

1. Singapore is a small island city State, independent since 1965. The efficient use of its limited natural resources has been a priority since its independence. Today, with a population of 6.11 million people,¹ Singapore is a high-income, advanced economy that has rapidly transformed in 60 years from a trading port with high unemployment to a diversified economy with strong manufacturing and services sectors, including petrochemical, aviation and shipping. In terms of gross domestic product per capita, it is the fourth-richest country in the world, a metric that has doubled in real terms over the past 20 years.² Singapore also ranks first globally in human capital development,³ which reflects its expertise and capacity.

2. Aware of its limited space and natural resources, there has been an increasing interest in environmental sustainability in Singapore. Recognizing that climate change, water scarcity, energy challenges and reliance on the import of food are existential threats, Singapore has developed diverse strategies, including in relation to water and energy efficiency, climate mitigation and adaptation measures and food safety. Considering the compound crises of climate change, biodiversity loss and toxic pollution, and that seven out of the nine planetary boundaries have been crossed, which exacerbates human rights impacts and inequalities, it is important for Singapore to strengthen a best-available science approach and to incorporate and mainstream human rights- and ecosystem-based approaches to make sure that current efforts effectively prevent, mitigate and remediate environmental harm in the city State and abroad.

3. The population of Singapore is diverse, comprising primarily Chinese, Malay and Indian ethnic groups.⁴ The Government has instituted immigration policies targeted at highly skilled workers, who are given the opportunity to become permanent residents or citizens. The country has become increasingly attractive to international students. The foreign-born population has grown rapidly, to 46 per cent of the total population in 2015,⁵ with approximately 800,000 migrant workers,⁶ a large proportion of whom are construction workers, mostly men, and domestic workers, mostly women. At the same time, growing numbers of Singaporeans are emigrating for education and work experience in highly skilled sectors such as finance, information technology and medicine.

4. Singapore is responsible for 0.1 per cent of global carbon emissions, although it ranks high in relation to per capita carbon emissions, consumption-related emissions and other demands linked to the triple planetary crisis of climate change, biodiversity loss and toxic pollution. There is an opportunity to shift focus away from unlimited economic growth and increasing consumption to centring more on well-being that incorporates the existing, limited natural resources and the reduction of pressure on the environment, nationally and abroad.

5. The Special Rapporteur on the human right to a clean, healthy and sustainable environment is sincerely grateful to the Government for accepting her visit and for cooperating in its planning and implementation, in particular as it was her first country visit since assuming the mandate in May 2024. It was also the first visit of any Special Rapporteur

¹ See https://www.population.gov.sg/files/media-centre/publications/Population_in_Brief_2025.pdf.

² See <https://worldpopulationreview.com/country-rankings/gdp-per-capita-by-country>.

³ See <https://statbase.org/data/sgp-human-capital-index>.

⁴ See <https://www.statista.com/topics/5763/demographics-of-singapore>.

⁵ See https://www.indexmundi.com/singapore/demographics_profile.html.

⁶ See <https://www.mom.gov.sg/foreign-workforce-numbers>.

on the right to a healthy environment to South-East Asia, and the first visit to Singapore of a special procedure mandate holder in almost 10 years.

6. During her visit, the Special Rapporteur held a wide range of meetings, including with representatives of the Ministry of Foreign Affairs, the Ministry of Sustainability and the Environment, the Public Utilities Board (the National Water Agency), the Singapore Food Agency, the National Environment Agency, the Ministry of National Development and its Urban Redevelopment Agency, Centre for Liveable Cities and National Parks Board, the Ministry of Trade and Industry and its agency Enterprise Singapore, the Ministry of Law and the National Climate Change Secretariat in the Prime Minister's Office. She also met with a judge of the Supreme Court and with Members of Parliament. Site visits included the TuasOne Waste-to-Energy Incineration Plant, the Marina Barrage, the Sisters' Islands Marine Park and Jurong Island and its petrochemical complex.

7. The Special Rapporteur also met with academics, members of civil society, youth leaders and other people who shared their views and life stories. She is deeply grateful to everyone in Singapore for the kind reception and for sharing their knowledge, expertise and experiences on the right to a healthy environment with her.

II. Legal and policy framework

A. International legal context

8. Singapore has ratified four of the nine main human rights conventions: the International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination against Women, the Convention on the Rights of Persons with Disabilities and the Convention on the Rights of the Child, as well as the Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict.

9. Singapore is a founding member of the Association of Southeast Asian Nations (ASEAN), which, in 2012, adopted the ASEAN Human Rights Declaration, which contains a reference to the right to a safe, clean and sustainable environment. A recent positive development is the adoption of the ASEAN Declaration on the Right to a Safe, Clean, Healthy and Sustainable Environment, on 26 October 2025. The explicit recognition of the human right to a safe, clean, healthy and sustainable environment is a fundamental step forward in addressing the triple planetary crisis. The Special Rapporteur has been collaborating with the process and looks forward to the regional plan of action, a process that must be participatory and inclusive and to which she remains available to contribute.⁷ The effective implementation of the Declaration should be aligned with and reinforce existing norms in multilateral environmental agreements. It should strengthen the role of business and the protection of human rights defenders and improve public participation, access to information and access to justice and remedy.

10. Singapore is a Party to the following international environmental agreements: the United Nations Framework Convention on Climate Change, the Kyoto Protocol, the Paris Agreement, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the Stockholm Convention on Persistent Organic Pollutants, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Minamata Convention on Mercury and the Montreal Protocol on Substances that Deplete the Ozone Layer.

11. Singapore was crucial in the drafting of the United Nations Convention on the Law of the Sea, adopted in 1982, and fundamental in achieving the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, which will enter into force in January 2026. It was ratified by Singapore in September 2024.

⁷ See <https://www.ohchr.org/en/press-releases/2025/10/un-experts-welcome-landmark-asean-declaration-right-safe-clean-healthy-and>.

12. Singapore, as all other States, has the *erga omnes* obligation to prevent significant environmental harm, according to the International Court of Justice.⁸ The obligation to effectively regulate, control, monitor and enforce activities that might cause significant environmental harm derives from that.⁹ In its submission to the Court on 20 March 2024, Singapore argued that the obligation to prevent environmental harm was customary international law, adding that the obligation extended to significant environmental harm caused to areas beyond national control.¹⁰ The Court agreed with that perspective, as argued by the majority of States. It is important for Singapore to ensure the inclusion thereof in its national legal framework, including planning and regulations, as well as in its contributions in regional and international multilateral forums.

13. Singapore has taken an active part in multilateral cooperation, including that aimed at advancing environmental protection internationally. For example, the Singapore Cooperation Programme provides capacity-building in areas such as water, sanitation and sustainable urban development. In 2022, Singapore introduced the Sustainability Action Package to further support developing countries in addressing sustainability and climate challenges. The Package is focused on decarbonization, strengthening water and food security, financing and managing green projects, developing sustainable infrastructure and advancing carbon market management.

B. National legal context

14. The right to a clean, healthy and sustainable environment is a fundamental human right, as recognized by the General Assembly in its resolution 76/300 and the Human Rights Council in its resolution 48/13. Singapore voted in favour of the General Assembly resolution, joining 160 other States on that historical vote. In addition, as mentioned above, Singapore agreed to the adoption of the 2025 ASEAN Declaration on the Right to a Safe, Clean, Healthy and Sustainable Environment, which contains an express recognition of that right. Currently, the human right to a clean, healthy and sustainable environment is not expressly included in the domestic legal framework of Singapore; however, national regulations incorporate some of the elements of that right.

15. Advancing the recognition and implementation of the human right to a safe, clean, healthy and sustainable environment is fundamental, considering that, as the International Court of Justice concluded, it is a precondition of, inherent in and essential for the effective enjoyment of all human rights, given the interdependence between human rights and the protection of the environment.¹¹ Therefore, the Special Rapporteur emphasizes the importance of Singapore considering reviewing its national legal framework and expressly recognizing the human right to a healthy environment, incorporating it into policies and regulations. Singapore should also cooperate with other ASEAN States to apply the Declaration through the regional plan of action.

1. Constitution

16. The Constitution of Singapore was first adopted in 1959 and has since undergone multiple amendments, the most recent in 2010. Following independence from Malaysia on 9 August 1965, a provisional constitution was enacted on 22 December 1965, comprising three documents: (a) the Constitution of the State of Singapore 1963; (b) the Republic of Singapore Independence Act 1965; and (c) parts of the Malaysian Federal Constitution incorporated through the Independence Act. In March 1980, the Attorney General issued a consolidated reprint of the Constitution, integrating all amendments into a single unified document.¹²

17. In the Constitution, the focus on fundamental liberties is on civil and political rights; the environment is not mentioned. The Government's position, as observed by legal scholars,

⁸ *Obligations of States in respect of Climate Change, Advisory Opinion*, 23 July 2025, para. 439.

⁹ See [A/80/187](#).

¹⁰ See <https://api.icj-cij.org/sites/default/files/case-related/187/187-20240320-wri-04-00-en.pdf>.

¹¹ *Obligations of States in respect of Climate Change, Advisory Opinion*, 23 July 2025, para. 393.

¹² See <https://sso.agc.gov.sg/act/cons1963>.

is that effective environmental management can be achieved through laws and regulations without the need for a constitutional environmental right. While constitutional recognition has been done in the majority of States globally to mainstream the right and add clarity, legal recognition is another option that can help with understanding of the elements of the right and how to better interpret them in the national context.

2. National legislation and environmental policy

18. Singapore has developed a highly technical system of environmental regulations, aiming to balance rapid development with sustainability. Agencies such as the National Environment Agency and the Ministry of Sustainability and the Environment enforce laws covering pollution control, waste management and water protection. Key legislation, such as the Prevention of Pollution of the Sea Act (1990), the Hazardous Waste Act (1997), the Environmental Protection and Management Act (1999), the Energy Conservation Act (2012), the Carbon Pricing Act (2018) and the Resource Sustainability Act (2019), requires industries and individuals to adopt practices aiming to prevent environmental degradation. Existing penalties for non-compliance reinforce accountability and, in general, the domestic legal framework reflects the objective of sustainable growth and environmental protection for future generations and contains some basic references to how environmental degradation and climate change have an impact on human health. Fully integrating human rights- and ecosystem-based approaches into policies and regulations will contribute to complementing the existing technical-scientific perspective, so that green and blue spaces support natural ecosystems and increase well-being, as described below.

19. The National Environment Agency is responsible for the formulation and enforcement of environmental policies and regulations. It oversees a broad spectrum of environmental issues, including air and water quality management, waste management, industrial pollution regulation, energy efficiency, measures to mitigate hydrofluorocarbons and other climate change measures. It conducts regular inspections and audits to ensure that businesses comply with established environmental standards and practices. It also manages pollution control measures and is responsible for the effective implementation of environmental laws, thereby mitigating adverse impacts on public health, the environment and the climate.

20. The Ministry of Sustainability and the Environment serves as the overarching authority responsible for all matters related to environmental sustainability. It oversees the National Environment Agency and focuses on policy development concerning environmental conservation, climate change mitigation and resource management. It plays a critical role in facilitating inter-agency coordination and public engagement.

3. Long-term planning for present and future generations

21. Planning is central in Singapore, as evidenced by its long-term 50-year plans, followed up by master plans covering a 10- to 15-year period, regularly reviewed every 5 years. Current planning is defined in the Long-Term Plan Review 2021¹³ and the Draft Master Plan 2025,¹⁴ both of which include references to restoring the environment and nature and to climate change and urbanization as the links between a good-quality living environment and city resilience. At the same time, these plans include major growth projects, such as the expansion of Changi airport with an additional terminal to accommodate 50 million more travellers, making a total of 140 million passengers per year, the Long Island reclamation project and the industrial development projects in the West Region, including Tuas Port, Jurong Lake District and Jurong Innovation District.

22. Considering the ambitious plans for the next 50 years, and the potential significant environmental, social and human rights impacts that these might have, as they include infrastructure projects such as increasing housing, port-industry integration and synergistic industries, increasing the green economy and innovation and becoming a world-leading hub for aerospace and digital and cybersecurity industries, it is fundamental that the Long-Term Plan, the Master Plan and all planning efforts are updated based on the best available science,

¹³ See https://www.ura.gov.sg/-/media/Corporate/Planning/LTPR21/LTPR_publication.pdf.

¹⁴ See <https://www.uradraftmasterplan.gov.sg/themes/enabling-sustainable-growth/introduction>.

considering planetary boundaries and impacts on the environment, climate and human rights, including public health and present and future generations. These efforts and activities must also include comprehensive impact assessments.

23. In 2021, the Singapore Green Plan 2030 was launched “to galvanize a whole-of-nation movement and advance Singapore’s national agenda on sustainable development”.¹⁵ The Plan is aimed at strengthening the efforts of Singapore to implement the Paris Agreement and the 2030 Agenda for Sustainable Development. It includes sectoral plans and targets over the next 10 years to achieve long-term net-zero emission targets and build up its climate, resource and economic resilience. The Green Plan contains targets that will enhance food security, ensure sustainable water management, scale up the deployment of clean energy, promote sustainable economic growth and green infrastructure and industries and position the city to be resource-efficient and climate-resilient. The Green Plan also includes targets for the public sector.¹⁶

24. Although the Long-Term Plan is aimed at protecting present and future generations, it does not fully include all environmental and climate goals considered in the Green Plan, the 2030 Agenda and international climate and environmental commitments. Although the long-term development plans of Singapore are periodically reviewed, further alignment between the long- and midterm plans and the Green Plan is crucial to promote coherence and advance consistent, integrated actions to better consider and protect present and future generations’ rights.

4. Environmental, social and human rights impact assessments

25. Singapore takes a systematic and science-based approach to assessing and mitigating the environmental impacts of development projects through its domestic Environmental Impact Assessment Framework, which is part of the planning and evaluation processes administered through the Urban Redevelopment Authority. Technical agencies assess the expected environmental impacts of development projects.¹⁷

26. According to information provided during the visit, projects with significant impact are subject to further studies and “mitigation measures are put in place where necessary”. Reports from environmental impact assessments are “publicly available online, unless there are specific reasons to maintain confidentiality like security considerations”.¹⁸ The existing Singaporean Environmental Impact Assessment Framework, including its processes, timelines and consultations with community stakeholders, is determined by technical agencies and applicable guidelines on a case-by-case basis and development proposals are expected to meet existing regulatory requirements under various environmental protection-related legislation. Currently, there is no specific law regulating these assessments.

27. The Special Rapporteur strongly encourages Singapore to further regulate environmental impact assessment processes and guarantee that all projects, including those related to development and climate adaptation, are thoroughly and comprehensively evaluated prior to starting. Her report to the General Assembly at its eightieth session¹⁹ provides a framework for environmental, social and human rights impact assessments for States to comply with their obligations to regulate, undertake, monitor and enforce these assessments, while ensuring adequate access to information, public participation and access to justice and effective remedies. As explained in that report, environmental, social and human rights impact assessment processes must:

¹⁵ See <https://www.greenplan.gov.sg/overview>.

¹⁶ See <https://www.greenplan.gov.sg/key-focus-areas/green-government>.

¹⁷ See the submission of Singapore available at <https://www.ohchr.org/en/calls-for-input/2025/environmental-impact-assessments-strategic-environmental-impact-assessments>.

¹⁸ See <https://www.ura.gov.sg/Corporate/Planning/Our-Planning-Process/Bringing-plans-to-Reality/Environmental-Impact-Assessment>.

¹⁹ A/80/187.

- (a) Be undertaken as early as possible and prior to the commencement of a project;
- (b) Comprehensively assess direct, indirect, domestic, transboundary, adverse, positive, cumulative, short- and long-term, climate, biodiversity, environmental, health, cultural, social and human rights impacts;
- (c) Follow precautionary, prevention, proportionality, best available science, maximum disclosure and equity and non-discrimination principles;
- (d) Be independent;
- (e) Ensure access to information, public participation and access to justice and special measures for the protection of the rights of marginalized people.²⁰

28. It is vital that environmental, social and human rights impact assessments are clearly regulated and specify, at a minimum:

- (a) The full range of activities and associated impacts, specifying physical and technical characteristics (including geographical and ecosystem sensitivity) and analysing a no-action baseline among any other project alternatives;
- (b) The applicable procedure, including how access to information, public participation and access to justice will be guaranteed;
- (c) The delineation of responsibilities and duties across proponents, authorities, experts conducting assessments and decision makers;
- (d) How assessments will inform and govern decisions regarding proposed activities and monitoring;
- (e) The steps and measures to be adopted in the event of non-compliance;
- (f) Assessments for modifications of approved projects, including expansions.²¹

III. Fulfilling the right to a clean, healthy and sustainable environment

29. Despite Singapore not expressly recognizing the right to a healthy environment in its national legislation, it has supported the United Nations and ASEAN texts recognizing this right. Hence, advancing the implementation of the right is fundamental.

30. Given that the International Court of Justice concluded that it was difficult to see how the obligations to guarantee the effective enjoyment of human rights could be fulfilled without at the same time ensuring the protection of the right to a clean, healthy and sustainable environment,²² it is fundamental for Singapore to ensure the protection of the right to a clean, healthy and sustainable environment as a human right.

31. The right to a healthy environment is compound and includes substantive and procedural elements. The substantive elements encompass clean air, safe and sufficient water, healthy and sustainably produced food, a non-toxic environment, healthy biodiversity and ecosystems and a safe climate. The procedural elements, also recognized as human rights, are access to environmental information, public participation in environmental decision-making processes and access to justice with adequate remedies. These elements are interconnected; therefore, programmes, policies and projects must be implemented taking an intersectional, integrated and comprehensive approach.²³

32. The Committee on the Rights of the Child, in its general comment No. 26 (2023), clarified the obligations of States to address environmental harm and climate change, emphasizing the urgent need to address the adverse effects of environmental degradation, especially in the context of climate change and the enjoyment of children's rights. The

²⁰ Ibid., para. 32.

²¹ Ibid., para. 34.

²² *Obligations of States in respect of Climate Change, Advisory Opinion*, 23 July 2025, para. 393.

²³ See [A/79/270](#).

Committee also explained how rights under the Convention on the Rights of the Child applied to environmental protection and confirmed that children had a right to a clean, healthy and sustainable environment.

A. Clean air

33. Breathing clean air is indispensable for everyone. In Singapore, air pollution sources are identified in the regulations and a network of 23 air quality monitoring stations continuously monitors six key criteria air pollutants (particulate matter (PM10), fine particulate matter (PM2.5), sulphur dioxide, ozone, carbon monoxide and nitrogen dioxide). Singapore has met its 2020 air quality targets for sulphur dioxide, nitrogen dioxide and carbon monoxide; however, as reported in official information, meeting the targets for PM10, PM2.5 and ozone levels continues to be a challenge.²⁴

34. The Pollutant Standards Index provides accurate and easily understandable information to the public about daily air-quality levels. It is available online and through a free application. In 2024, 13.5 per cent of days were in the “Good” range and 86.5 of days were in the “Moderate” range.

35. Transboundary haze, caused by forest fires in the region linked to deforestation and exacerbated by climate change, can have a negative impact on air quality in Singapore. The last significant episodes of haze occurred in 2015.²⁵ They caused different impacts, including school closures to protect children’s health. As a Party to the ASEAN Agreement on Transboundary Haze Pollution, Singapore has committed to preventing and monitoring transboundary haze pollution resulting from land and/or forest fires that should be mitigated through concerted national efforts and intensified regional and international cooperation. It is of great importance to implement the Agreement, which is instrumental in implementing effective actions against air pollution.

36. Singapore has developed early haze warnings, the measurement and dissemination of air-quality information and guidelines for dealing with haze-related issues.²⁶ In 2015, it launched an investigation into companies potentially responsible for it. During the visit, the Special Rapporteur requested information about the progress and results of the investigation; she was told that it was not available as investigations were ongoing. She underlines the importance of identifying those responsible for transboundary haze and enforcing actions to prevent reoccurrence.

37. Other measures related to clean air include the effective regulation of industries by ensuring a buffer with residential areas and fitting pollution control equipment to comply with emission limits. Fuel-burning equipment must be fitted with chimneys of an approved height and emission of black smoke from chimneys is prohibited. The National Environment Agency requires regular monitoring of industry emissions.²⁷ The Special Rapporteur visited Jurong Island, where many petrochemical industries are located. Continued effective regulation, enforcement measures and updated information related to industry emissions are vital, considering the potential risks for human health and the environment from such activities, for both present and future generations.

38. In Singapore, the number of vehicles and their emissions are strictly controlled under the Vehicular Emissions Regulations of the Environmental Protection and Management Act (1999), which has become progressively stricter as it has been aligned with technological advances and air-quality goals.²⁸ To further reduce carbon emissions and air pollution, the Electric Vehicles Roadmap is aimed at phasing out internal combustion engine vehicles by focusing on a transition to electric vehicles and, thus, on cleaner energy by 2040. To support this, the Government offers several incentive schemes to lower the upfront costs of

²⁴ See <https://www.mse.gov.sg/policies/clean-air>.

²⁵ See <https://www.straitstimes.com/singapore/environment/haze-in-singapore-a-problem-dating-back-40-years>.

²⁶ See <https://www.nea.gov.sg/our-services/pollution-control/air-pollution/managing-haze>.

²⁷ See <https://www.mse.gov.sg/policies/clean-air>.

²⁸ See <https://sso.agc.gov.sg/SL/EPMA1999-RG6?DocDate=20240328>.

purchasing electric vehicles and encourage the transition. Singapore strictly controls the total vehicle population through its vehicle quota system, under which only a certain number of certificates of entitlement are permitted. This has helped curb and control the number of vehicles, which in turn helps curb air pollution.²⁹

39. Singapore is adopting strategies to address the health impacts of exposure to heat and transboundary haze, factoring in the needs of people in vulnerable situations. Such strategies include improved ventilation, the issuance of heat advisories and research on public health and the management of haze situations. Complementing existing efforts, it is vital to further consider differentiated health impacts and strengthen health-informed planning strategies, especially during worse air-quality episodes and for people in vulnerable situations. Key actions include: (a) considering the cumulative impacts of poor air quality and heat waves, as climate change increases the amount and intensity of heatwaves in Singapore; (b) prioritizing strategies, alerts and research in relation to people and groups in vulnerable situations such as children, older persons, women and outdoor workers, including construction workers; and (c) ensuring that strategies, advisories and research take into account gender, age, disability, access to health systems and other factors that could increase health risks. Implementing measures that protect public health and uphold human rights is vital to safeguarding well-being, the right to health and the right to a healthy environment.

B. Safe climate

40. The climate crisis threatens the well-being of humans and the planet, demonstrating the importance of guaranteeing a safe climate. Singapore is acutely vulnerable to climate change, which also has an impact on human rights, including to the rights to life, health, food, water, housing, an adequate standard of living and a healthy environment, cultural rights and the rights of the child. For Singapore, a small, densely populated city State, in which about one third of the land is less than 5 metres above mean sea level, climate change poses an existential threat. Sea levels are projected to rise by up to 1.15 metres by 2100 and could rise by 4 to 5 metres with the compounding effects of high tides, storm surges and land subsidence.³⁰ Heat is also a big factor: 2024 was the warmest year on record, tied with 2019 and 2016. The projected increase in the average daily mean air temperature by the end of the century is between 0.6°C and 5.0°C, the number of very hot days (exceeding 33°C for an hour or more during the day) is expected to increase to between 41 and 351 annually (compared with 21 very hot days annually in the past) and more extreme rainfall (flooding) and dry spells are expected.³¹

41. Potentially vulnerable and marginalized populations (women, children, older persons, persons with disabilities and persons living in poverty, whose adaptive capacity may be limited by marginalization) are suffering disproportionate impacts. While some information is available in Singapore documenting differentiated risks and impacts in public policy, such as the heightened vulnerability of older persons during heatwaves, it is crucial and urgent to further understand differentiated climate impacts on other groups and to integrate them into measures and policies. Special attention should be paid to documenting particular risks and impacts on children, women and persons living in poverty and other forms of vulnerability and thus facing higher risks. Such documentation is essential to develop and implement tailored and effective measures grounded in the principles of equity and non-discrimination. To do so, Singapore should consider scientific evidence analysing these differentiated impacts, including from the Intergovernmental Panel on Climate Change, United Nations entities and the special procedures.³²

²⁹ See <https://onemotoring.lta.gov.sg/content/onemotoring/home/buying/upfront-vehicle-costs/certificate-of-entitlement--coe-.html>.

³⁰ See <https://www.mss-int.sg/V3-climate-projections>.

³¹ See https://www.mss-int.sg/docs/default-source/v3_reports/v3-sr-executive-summary.pdf.

³² See, for example, Committee on the Rights of the Child, general comment No. 26 (2023); A/HRC/50/57; A/HRC/56/46; and <https://www.ipcc.ch/report/ar6/wg2>.

1. Mitigation efforts

42. Singapore contributes 0.1 per cent of global carbon emissions. Based on 2022 emissions, the country ranked 134th globally in terms of carbon intensity and 21st for carbon emissions per capita.³³ Therefore, Singapore has a leading role and an opportunity to both increase its ambition in carbon-mitigation efforts and lead regionally, especially in key sectors, to motivate others to do so. In 2022, total national emissions were 58.6 metric tons of carbon dioxide equivalent, from which industry-related emissions accounted for 49 per cent, power for 36.5 per cent, transport for 12 per cent, buildings for 0.9 per cent, waste and water for 0.7 per cent, households for 0.4 per cent and others for 0.5 per cent; secondary emissions had a similar distribution.³⁴

43. Singapore raised its climate ambition in its second nationally determined contribution, submitted in February 2025 to the secretariat of the United Nations Framework Convention on Climate Change, committing to reduce emissions to between 45 and 50 million tonnes of carbon dioxide equivalent by 2035, with emissions peaking by or before 2030, and to reach net zero by 2050.³⁵ The nationally determined contribution incorporates a positive change, from considering emissions intensity to absolute emissions. However, the aviation and shipping sectors are not included in the national inventories, despite being major emitting sectors. Offsetting strategies are included in the nationally determined contribution by means of carbon credits, bilateral cooperation and other measures. Although the role of international cooperation and carbon markets in achieving climate goals is recognized in the nationally determined contribution of Singapore, it remains important to continue advancing robust measures to reduce fossil fuel dependency. Continued efforts to diversify sustainable energy sources and decrease reliance on fossil fuels is essential to ensure that carbon offsets complement and do not substitute key domestic emission reductions. This approach aligns with the recommendation of the Intergovernmental Panel on Climate Change for deep, sustained and rapid emission reductions across all systems to limit warming to 1.5°C and that carbon dioxide removal and offsetting measures cannot compensate for delayed emissions reductions in other sectors.³⁶

44. Transitioning to a lower-carbon economy has been one of the priorities of Singapore, leading to transition from coal to gas, which today corresponds to 95 per cent of its fuel generation mix (compared with about 18 per cent in 2000). The Government acknowledges that gas is a fossil fuel, albeit a less carbon-intensive one than coal. Singapore does not subsidize fossil fuel use and instead taxes it (e.g. through petrol duties) to reflect its negative externalities. Since 2020, Singapore has more than tripled its solar power deployment and is on track to achieve at least 2 gigawatt peak by 2030, which would meet about 3 per cent of the country's total projected electricity needs.³⁷

45. Improving energy efficiency is one of the country's main mitigation strategies, including a whole-of-government approach. The National Environment Agency actively promotes energy efficiency in the industrial, household and public sectors through legislation, incentives and public education. The Building and Construction Authority and the Land Transport Authority promote energy efficiency in the buildings and transport sectors, respectively. For example, to reduce energy consumption from air-conditioning, on which Singapore is highly dependent, on 16 May 2025, during the Special Rapporteur's visit, the Government launched the Go25 movement, encouraging everyone to set the air-conditioned temperature to 25°C.³⁸ Natural solutions such as ventilation should also be implemented to further reduce energy consumption, while using traditional knowledge.

³³ See <https://www.nccs.gov.sg/singapores-climate-action/singapores-climate-targets/singapore-emissions-profile/> and <https://www.iea.org/countries/singapore/emissions>.

³⁴ See <https://www.nccs.gov.sg/singapores-climate-action/singapores-climate-targets/singapore-emissions-profile>.

³⁵ See <https://www.nccs.gov.sg/singapore-submits-2035-nationally-determined-contribution>.

³⁶ See <https://www.ipcc.ch/report/ar6/wg3>.

³⁷ See <https://www.nccs.gov.sg/singapore-submits-2035-nationally-determined-contribution>.

³⁸ See <https://www.mse.gov.sg/latest-news/launch-of-go25-national-movement>.

46. Reporting on scope 1 and 2 greenhouse gas emissions by listed companies is scheduled to start in the fiscal year 2025: over 80 per cent of companies have already disclosed these emissions in their sustainability reports. It was announced in August 2025 that reporting on scope 3 greenhouse gas emissions by Straits Times Index constituents, which collectively account for 75 per cent of total market capitalization on the Singapore Exchange, has been postponed to the fiscal year 2026. Singapore has implemented some measures to strengthen industry action and responsibility, and it is of great importance to further strengthen these comprehensive reporting systems to better monitor businesses.

47. The objective of Singapore on maritime emissions reductions relied primarily on the International Maritime Organization net-zero framework. The recent unfortunate delay in approving the framework underscores the importance of ensuring that implementing effective national measures must go hand in hand with global efforts based on international coordination to achieve meaningful reductions.³⁹ Alongside its global leadership in efforts to reduce emissions, it is imperative for Singapore to strengthen its domestic efforts to mitigate emissions in the aviation and shipping sectors.

2. Adaptation

48. The adaptation plan of Singapore covers resilience in the areas of food, water, public health and biodiversity. Priority adaptation measures include enhancing knowledge and expertise, coastal protection, water resource management and drainage. Dedicated finance for these measures includes the Coastal and Flood Protection Fund of 10 billion Singapore dollars (2020 to 2025) to finance coastal protection infrastructure such as sea walls and tidal gates. Complementing this, the Public Utilities Board issued green bonds in 2022, the net proceeds of which will be used to fund projects under its green financing framework. The Cooling Singapore project draws upon the collaborative efforts of researchers from various institutions to create heat resilience.⁴⁰ Priority actions are coastal protection and improving resilience against inland and coastal flooding, taking sea level rise into account. These include ongoing site-specific studies to determine appropriate coastal protection solutions, aligning with ongoing site-specific studies and research and development, and future land reclaiming.⁴¹

49. The revision by Singapore of its nationally determined contribution and its increased measures to reduce carbon emissions are efforts in the right direction. Considering its vulnerability as a small island State, it is important to align its targets to the Paris Agreement maximum limit of 1.5°C and to consider the best available science. Being a wealthy country, Singapore can contribute to identifying how further reductions in consumption-related emissions can be made, prioritizing the needs of people in vulnerable situations. In so doing, new plans and developments should consider the environmental and climate impacts on nature and people to advance sustainability and well-being, including regarding public health, for example in relation to clean air.

C. Healthy ecosystems and biodiversity

50. Healthy ecosystems and biodiversity are vital for all beings and essential to human food, medicine, cultural practices and shelter, among others. Therefore, efforts to protect ecosystems and biodiversity, prevent further destruction and advance restoration, including in land and marine environments, are highly important and encouraged. This is particularly relevant in the context of biodiversity loss and given the numerous ecosystems and rich biodiversity of Singapore, due to its location in the Sundaland biodiversity hotspot.

51. Singapore is taking a leading role in the sustainability of cities. Policies and programmes are being implemented in line with the City in Nature vision.⁴² Moreover, in

³⁹ See <https://www.dnv.com/news/2025/decision-on-the-imo-net-zero-framework-delayed-for-one-year>.

⁴⁰ See <https://cityperspectives.smu.edu.sg/sites/wcs-2024/smu-landing/cooling-singapore-2.0.html?t=1767692550053>.

⁴¹ See <https://www.nccs.gov.sg/singapores-climate-action/coastal-protection>.

⁴² See <https://www.straitstimes.com/multimedia/graphics/2025/08/singapore-rethinking-nature-in-the-city/index.html>.

2008, the Singapore Index on Cities' Biodiversity was launched, as a self-assessment tool designed to help cities evaluate and monitor biodiversity conservation efforts over time.⁴³ The tool was developed with the secretariat of the Convention on Biological Diversity and, according to information provided by the Centre for Liveable Cities during the visit, is used by almost 40 cities globally.

52. The commitment of Singapore to biodiversity conservation is embodied in its National Biodiversity Strategy and Action Plan. There are four legally gazetted nature reserves, covering around 3,300 hectares, corresponding to about 5 per cent of the country's land, and another 20 areas encompassing most natural ecosystems on the island, including primary rainforest, secondary rainforest, freshwater swamp forest, streams, grasslands, sandy and rocky shores, mangrove forests, mudflats, seagrass meadows and coral reefs.⁴⁴

53. Most of the tropical primary forest in Singapore and a significant portion of its biodiversity was lost as a result of urban expansion and development, in particular in the nineteenth century. Therefore, preventing further biodiversity loss and prioritizing ecosystem and biodiversity restoration are fundamental. In 2020, the Government initiated the nationwide OneMillionTrees movement, to plant a million trees by 2030 to increase interconnected green spaces. Some species rehabilitation work has also borne fruit, for example, populations of threatened Oriental Pied Hornbill and Smooth-coated Otters have shown signs of recovery. During her visit, the Special Rapporteur met with several people working towards improving Singaporean biodiversity, including academics and the founder of the Woodlands Botanical Garden.⁴⁵ Supporting and valuing their work are vital.

54. While initiatives to restore and enhance ecosystems are highly commendable, greater efforts are needed to preserve existing natural habitats and remaining primary ecosystems. It is worth pointing out that reforestation and species rehabilitation cannot fully substitute the ecological, climate and cultural value of mature and undisturbed habitats. In line with international environmental principles emphasizing in situ conservation and the precautionary principle, the protection of remaining natural areas should be prioritized. Among the measures required is the strict avoidance and refusal of projects likely to cause significant environmental harm, as the loss of intact ecosystems cannot be effectively offset through replanting or habitat creation elsewhere.

55. Mainly through land reclamation, Singapore has, over time, increased its land area by about 25 per cent. As a result, the majority of the original shore (85 per cent), mangrove forests and natural beaches have been lost, including almost two thirds of the country's coral reefs.⁴⁶ Lately, there have been major efforts to protect and restore marine protected areas, such as with the creation of the first marine park, the Sisters' Islands Marine Park. During her visit to the park, the Special Rapporteur observed positive efforts to restore ecosystems, including corals and local biodiversity, and was informed of ongoing efforts to replant mangroves and seagrass and restore coastal areas.⁴⁷ Restoring ecosystems enhances biodiversity, strengthens natural defences against flooding and sea-level rise and sustains fisheries, making them essential climate-adaptation strategies in Singapore and other low-lying regions. These efforts for restoring marine and land ecosystems must continue and be significantly enhanced, ensuring that restoration outcomes outweigh the negative impacts of other projects, thereby generating a net positive environmental effect.

56. During the visit, the Special Rapporteur was informed by several people that the creation of some protected areas had limited access to traditional lands and traditional practices of foraging and fishing, such as for members of coastal communities, including the Orang Laut and Orang Pulau peoples. One example is the wetlands of Chek Jawa on Pulau Ubin: although its status as protected by the National Parks Board is considered a positive step by the communities, they could no longer access the beach or the water for their traditional sustainable practices. Finding ways in which the communities can use these areas

⁴³ See <https://www.nparks.gov.sg/nature/singapore-index-cities-biodiversity>.

⁴⁴ See <https://www.cbd.int/doc/nr/nr-06/sg-nr-06-en.pdf>.

⁴⁵ See <https://woodlandsbotanicalgarden.com>.

⁴⁶ See <https://dr.ntu.edu.sg/server/api/core/bitstreams/4b2684a6-f509-49ac-be8d-0b9a2f43951d/content>.

⁴⁷ See <https://newforestsandtrees.org/mangroves-of-singapore>.

for traditional, cultural and sustainable practices, including for education of younger generations, is important.

57. Co-management strategies are highly encouraged. Multiple examples worldwide show that coastal communities contribute to protecting coastal spaces, as they have a deep cultural connection to the sea. Involving coastal communities in scientific monitoring, research and considering their traditional knowledge have been shown to have positive results.⁴⁸ Across many countries, the establishment of community-based marine management involving local coastal communities, fishers and Indigenous Peoples has supported an ecologically holistic approach to fostering ownership, securing livelihoods, preserving cultural practices and strengthening communities.⁴⁹ A recent report by the United Nations Educational, Scientific and Cultural Organization on Indigenous knowledge and ancestral places also includes useful examples.⁵⁰

58. States must ensure that rights holders, in particular women, Indigenous Peoples, coastal and island communities, ocean defenders, small-scale fishers, children and youth, can fully and meaningfully participate in marine environmental governance at all levels. It is essential to secure preferential access and the co-management of coastal areas and resources to coastal communities, respecting free, prior and informed consent and local and traditional governance systems and guaranteeing their participation in bodies and processes relating to the ocean-climate-biodiversity nexus at all levels.⁵¹

59. As a result of land reclamation, Singapore has lost several sites that supported livelihoods dependent on the sea on the outer islands, age-old fishing villages, *kelongs* (large, traditional offshore fishing platforms) and prawn farms.⁵² The impacts of the land reclamation strategy of Singapore extend beyond its shores, as it needs resources, such as sand, from neighbouring countries.⁵³ Extensive sand dredging can cause severe environmental damage, undermining coastal protection, accelerating erosion and affecting local ecosystems and communities. This situation highlights the importance of ensuring that land reclamation projects and related sand imports are conducted in a manner that fully considers, prevents and mitigates potential transboundary environmental and social impacts – even more so when these projects are aimed at advancing climate solutions.

60. It is of great importance to prevent and minimize the impacts on ecosystems, both in Singapore and abroad, including in the face of new and upcoming projects, such as Long Island, that will imply reclaiming land. The impacts on terrestrial and marine ecosystems need to be adequately assessed and prevented, as mentioned above. Planning and its impact assessments need to be done with people's needs taken into account and adequate access to information, public participation and access to justice. When carried out sustainably and with community support, land reclamation can help vulnerable coastal and island communities adapt to climate change. Land reclamations should consider historical damage and restoration and protect fragile marine ecosystems, in line with the obligation to protect marine ecosystems.⁵⁴

⁴⁸ See <https://www.fao.org/voluntary-guidelines-small-scale-fisheries/en>.

⁴⁹ See annex III, entitled “Good practices”, available at <https://www.ohchr.org/en/documents/thematic-reports/ahrc5859-ocean-and-human-rights-report-special-rapporteur-human-right>.

⁵⁰ See <https://unesdoc.unesco.org/ark:/48223/pf0000395661>.

⁵¹ A/HRC/58/59, para. 100 (e).

⁵² See <https://dr.ntu.edu.sg/server/api/core/bitstreams/4b2684a6-f509-49ac-be8d-0b9a2f43951d/content>.

⁵³ See https://unepgrid.ch/storage/app/media/documents/Sand_and_sustainability_UNEP_2019.pdf and <https://www.cmi.no/publications/file/8586-mapping-global-sand-extraction-research-and-policy-options.pdf>.

⁵⁴ See A/HRC/58/59; and https://www.itlos.org/fileadmin/itlos/documents/cases/31/Advisory_Opinion/C31_Adv_Op_21.05.20_24_orig.pdf.

D. Healthy and sustainably produced food

61. Healthy and sustainably produced food, as part of the human right to a healthy environment, implies that food production does not cause environmental or human health harms and guarantees the protection of food systems.

62. Considering its constraints in terms of land, Singapore relies heavily on importing food: more than 90 per cent of its food is imported. Some food travels long distances, which increases carbon emissions and potential environmental impacts. It also renders Singapore susceptible to supply disruptions linked to factors such as extreme global weather events and geopolitical tensions and could be worsened by increasing climate impacts.

63. In 2019, the goal of producing 30 per cent of food locally was set in the Food Agenda of Singapore, aligned with the 2019 Master Plan. Unfortunately, in 2024, local production of vegetables and seafood fell, setting back its goal. The decline followed disruptions in the farming sector, including closures of major players and delays or downsizing of production plans. As a result, local food output accounted for less than 10 per cent of demand, with both vegetable farming and aquaculture showing declines since 2021.⁵⁵

64. According to information received during the visit, food governmental production strategies seem to rely on high-technology research and aquaculture-related activities. Increasing consideration of natural sources, traditional ways of production, ancestral knowledge, permaculture and other kinds of sustainable food production systems is important for improving overall sustainability and reducing water and energy demands, while reducing climate impacts and promoting healthy biodiversity and ecosystems. For example, the Special Rapporteur met with persons who had taken the initiative to grow their own food. They mentioned a lack of government support for their initiatives, despite the opportunity of local food gardens to contribute to an increase in local food production. Given existing challenges, initiatives like this should be supported to help achieve goals of local food production, while benefiting from natural solutions and ancestral knowledge.

65. Considering the need to import food, it is important to recall the responsibility of the State to ensure that imported food is produced in an environmentally sustainable manner. This entails strengthening certification systems and implementing adequate monitoring mechanisms to prevent imported food from exacerbating climate change, such as through the indirect promotion of deforestation and other unsustainable land-use practices. Food imports should contribute to the protection of human rights and the environment where the food is produced. Given the high levels of food waste in Singapore (784,000 tonnes in 2024),⁵⁶ prioritizing strategies to reduce waste is essential for enhancing food system sustainability and mitigating associated environmental impacts.

E. Non-toxic environments where people can live, work, learn and play

66. A healthy environment includes the right for everyone to enjoy non-toxic environments and is directly related to waste production and its management, among other aspects.

67. The National Environment Agency plans, develops and administers the solid and hazardous waste management systems of Singapore, including licensing and regulatory functions to ensure that waste is properly collected, treated and disposed of. The integrated solid waste management system of Singapore is focused on reducing, reusing and recycling. Waste-to-energy incineration plants have been selected as the best technical solution as they reduce waste volume efficiently to conserve landfill space. Singapore uses some of the world's most advanced waste management systems.⁵⁷

⁵⁵ See <https://www.sfa.gov.sg/docs/default-source/publication/sg-food-statistics/singapore-food-statistics-2024.pdf>.

⁵⁶ See <https://www.nea.gov.sg/our-services/waste-management/3r-programmes-and-resources/food-waste-management>.

⁵⁷ <https://www.sg101.gov.sg/environment/case-studies/wm>.

68. Currently, about 90 per cent of solid waste is incinerated, generating about 2 per cent of the country's electricity. Approximately 2,000 tons of solid waste per day, including incineration ash and non-incinerable waste, are disposed of on Semakau Island, where the only active landfill is located. The Government estimates that this landfill will be full by 2035: reducing waste is therefore essential. Singapore aims to reduce the amount of waste sent to landfill by 20 per cent per person by 2026, and 30 per cent by 2030. To achieve this, efforts to reduce waste, including food and plastic waste, and improved separation of waste should be prioritized, focusing on the sectors and businesses producing most waste. It is also necessary to assess and address the environmental impacts of Semakau Island, which was created through land reclamation, and further advance restoration measures there. These actions are consistent with the State's obligations under international environmental law, including the duty to prevent environmental harm and to ensure restoration where degradation has occurred, including in the ocean and marine environments.

69. Plastic use and, thus, plastic waste are considerable issues in Singapore. In 2023, only 5 per cent of 957,000 tons of plastic waste was recycled; the remainder was incinerated. Packaging waste accounts for about one third of all domestic waste and over 50 per cent of packaging is plastic. Singapore aims to increase its recycling rate to 70 per cent by 2030. Other measures have been implemented, including a mandatory packaging reporting regime, launched in 2021, requiring producers of packaged products and retailers with an annual turnover of more than US\$7.7 million to disclose packaging data and waste management plans.⁵⁸ A programme on extended producer responsibility for beverage containers will start on 1 April 2026.⁵⁹ In addition, a 5-cent disposable carrier bag charge at major supermarkets, implemented in July 2023, has encouraged over 90 per cent of shoppers to bring their own bags.⁶⁰

70. The Special Rapporteur strongly recommends that the Government and businesses implement a whole-of-cycle perspective, urgently find ways to stop using single-use plastic and advance other measures to significantly reduce plastic production and consumption, and that individuals also support such measures. Reducing plastic waste will increase waste management efficiency while helping to achieve zero-waste targets. It will also benefit the health of the population and nature of Singapore, tackling climate change and improving marine conservation, air quality and a safe climate.

F. Safe and sufficient water

71. Access to safe and sufficient water is vital for the right to a healthy environment. Singapore has achieved an impressive 100 per cent coverage of the population of drinking water and sanitation. Water sources include 250 million gallons per day of water imported from Malaysia under the 1962 Water Agreement, which will expire in 2061, local water catchment, desalinization plants and recycled water treatment.⁶¹ Since 2011, the water catchment area of Singapore increased from half to two thirds of the country's land surface, becoming one of the few countries in the world to harvest urban stormwater on a large scale for potable consumption.

72. Water management in Singapore encompasses a concurrent emphasis on supply and demand management, including wastewater and stormwater management, institutional effectiveness and effective legal and regulatory frameworks. The entire water cycle is managed by the Public Utilities Board, which is also in charge of coastal protection. In terms of the affordability of drinking water, Singapore offers schemes to help offset rising utility bills, including rebates and climate vouchers for energy and water efficiency.

73. According to information provided to the Special Rapporteur by the Public Utilities Board during the visit, non-domestic water demand (including industrial) is projected to increase from half of the total water consumption in Singapore to about two thirds by 2065.

⁵⁸ See <https://www.nea.gov.sg/our-services/waste-management/mandatory-packaging-reporting>.

⁵⁹ See [https://www.nea.gov.sg/our-services/waste-management/3r-programmes-and-resources/e-waste-management/extended-producer-responsibility-\(epr\)-system-for-e-waste-management-system](https://www.nea.gov.sg/our-services/waste-management/3r-programmes-and-resources/e-waste-management/extended-producer-responsibility-(epr)-system-for-e-waste-management-system).

⁶⁰ See <https://sso.agc.gov.sg/SL/RSA2019-S291-2023?DocDate=20230525>.

⁶¹ See <https://www.pub.gov.sg/Public/WaterLoop/OurWaterStory>.

Water pricing has been central to water demand management, with a two-tier tariff that applies a higher rate to larger water users, which are typically from the non-domestic sector. As pricing of water will not guarantee a decrease in water use by industry, and in the context of climate change, water scarcity and toxic pollution, additional measures to reduce water demand and increase efficiency in industrial use should be further strengthened to ensure the sustainable use of water sources. A sustainable future requires curbing and managing energy and water demand in all sectors, including for artificial intelligence and the rise of cryptocurrencies.⁶² Human rights- and ecosystem-based approaches should be included, recognizing that water is a natural resource and that access to it a human right.

74. These complementary approaches are particularly important considering the existence of and potential increase in operational data centres, which use large amounts of water and energy.⁶³ Consequently, it is essential for Singapore to consider best available science and planetary boundaries related to water consumption and ensure that adequate regulation and monitoring of businesses are in place, including through schemes to reduce demand, avoiding continued and increased use of fossil fuel energy that aggravates climate change and worsens current and future social, environmental and human rights impacts.

G. Procedural elements of the right to a healthy environment

75. Access to information, public participation and access to justice are recognized human rights and essential elements of the right to a clean, healthy and sustainable environment. Information is also fundamental to understanding how environmental harms have differentiated impacts on individuals and groups of people, depending on their situation of vulnerability. States should proactively provide for and facilitate public participation, consider the views of the public in decision-making process and grant access to justice to solve conflicts. This contributes to more effective decisions and more involvement from the population and thus strengthens the rule of law and accountability.

76. The Planning Act and Planning (Master Plan) Rules allow for public review of changes, feedback and hearings.⁶⁴ Information and participation are included in the Draft Master Plan and the Long-Term Plan. While there is no express regulation regarding access to information and public participation, the Special Rapporteur was informed by representatives of the Government, members of civil society and people from different communities that spaces for engagement had increased in the previous decade, which was viewed as positive. The main reason identified for that improvement was the willingness and leadership of some government officials, given the lack of dedicated legislation and regulations.

77. Regulation of and further clarification on processes, criteria and opportunities for accessing information and public participation are crucial and significantly benefit national sustainability efforts and human rights. Noting that Singapore has facilitated public dialogues to contribute to its environmental and climate initiatives, such as in the case of public consultations launched by the National Climate Change Secretariat, the Government should further ensure that public information is available and accessible and that public participation is timely and effective. For example, information, such as that contained in environmental impact assessments, should be fully available.⁶⁵

78. The Special Rapporteur was informed that people, including youth, had reportedly been excluded from participating in certain processes because their opinions were perceived as divergent from dominant narratives. Information was received on cases of youth being subject to police investigation following appearances on social media holding signs on climate action. It is important for the Government to strengthen and continue efforts to increase public participation and protect the freedom of expression, especially of youth. Singapore should accept feedback and explain its decisions while keeping spaces open for

⁶² See [A/HRC/60/30](#).

⁶³ See [A/HRC/60/30](#).

⁶⁴ See <https://sso.agc.gov.sg/Act/PA1998?ProvIds=pr10-&ViewType=Within&Phrase=Hearing&WiAl=1>.

⁶⁵ [A/80/187](#), paras. 70–74.

dialogue. Information and public participation are rights and key for “green citizenry”, as the Government describes it, including in relation to youth and children, in local, national and international forums.⁶⁶

79. Lastly, considering the important role of businesses and environmental and climate impacts, special attention should be paid to the role of businesses, which should be scrutinized and potential greenwashing detected and prevented. Science has shown that not all environmental and climate impacts can be offset or economically valued and that some are irreversible. This underscores the limitations of relying solely on market-based or compensatory mechanisms to address environmental harm. Efforts for corporate responsibility and accountability should be further advanced, including by increased transparency, information-sharing on business activities and their impacts on value chains, including in relation with climate reporting, and climate actions such as climate finance.

H. Obligation to effectively monitor businesses and for businesses to respect human rights, including the environment

80. States have an obligation to regulate and effectively monitor business activities operating under their jurisdiction, including those domiciled within their territory but conducting operations abroad.⁶⁷ This responsibility stems from well-established principles of international law and human rights frameworks, which emphasize that States must ensure that corporate conduct under their jurisdiction does not contribute to environmental degradation or human rights violations, regardless of where such impacts occur. In this regard, several international bodies have reiterated that States, including Singapore, should strengthen their oversight mechanisms to ensure that enterprises headquartered or registered in their territory are held accountable for their actions overseas. This includes adopting clear regulatory frameworks, due diligence requirements and monitoring systems to prevent and address adverse environmental and climate-related impacts throughout global value chains. Given the position of Singapore as an international business hub, it is important that the country pays close attention to this issue to prevent adverse effects on the right to a clean, healthy and sustainable environment.

81. The International Court of Justice has warned that obligations to protect the climate system and the environment from greenhouse gas emissions are binding for all States and require effective regulation of private actors and meaningful international cooperation.⁶⁸ Several special procedures have urged Singapore to integrate human rights considerations for businesses registered there. The Special Rapporteur highlights the potential impacts on the right to a clean, healthy and sustainable environment and the need to pay attention to it, in particular given the position and importance of Singapore as an international business hub.⁶⁹

I. People living in vulnerable situations

82. Environmental and climate impacts affect everyone, although they have a disproportionately greater impact on those in situations of vulnerability. Many current government policies and programmes include people in vulnerable situations, such as older persons, in particular those with dementia, children, in particular with regard to air pollution, and outdoor workers, with regard to heat. Singapore should further consider differentiated impacts from environmental and climate change, including from heat, air pollution and sea-level rise, in its planning and measures. Special emphasis should be placed on gender-based impacts that are yet to be considered and can strengthen and increase the efficiency of current efforts, as well as including people with disabilities, people who work

⁶⁶ Committee on the Rights of the Child, general comment No. 26 (2023).

⁶⁷ [Guiding Principles on Business and Human Rights](#).

⁶⁸ *Obligations of States in respect of Climate Change, Advisory Opinion*, 23 July 2025.

⁶⁹ See communications SGP 2/2019, SGP 6/2022, SGP 5/2023 and SGP 1/2024, available from <https://spcommreports.ohchr.org/Tmsearch/TMDocuments>.

outdoors, migrant workers (working outdoors in construction or in shipyards) and people from low-income communities.

1. Older persons

83. Singapore faces one of the lowest fertility rates globally (1.15 children per woman), alongside rising life expectancy, leading to a rapidly ageing population and a shrinking youth demographic. By 2030, about 1 in 4 Singaporeans will be aged 65 or above, up from 1 in 10 in 2010. To prepare for this major demographic challenge, the Ministerial Committee on Ageing was established in 2007, bringing together multiple government agencies to coordinate efforts relating to population ageing.⁷⁰ Older persons in Singapore face heightened vulnerability to climate impacts due to a combination of physiological changes, pre-existing health conditions and socioeconomic factors. Older individuals may have a diminished perception of discomfort in hot environments, leading them to underestimate the risks associated with high temperatures. Climate change also exacerbates existing health conditions that are prevalent among older adults: extreme heat can worsen common age-related ailments such as heart, lung and kidney disease. Air pollution also has more serious effects on older people and increases health risks, including in relation to dementia. Singapore must therefore consider these intersecting factors in a more comprehensive manner to strengthen prevention and protection measures, including those addressing the underlying drivers of contamination.

2. Migrant workers

84. As of June 2025, the number of foreigners with work permits for the construction and marine shipyard and process sectors in Singapore was 460,300.⁷¹ These sectors are especially reliant on low-skilled foreign labour, as domestic uptake for jobs in this sector tends to be low.⁷² As Singapore prepares for more frequent and intense heat events, the country launched a heat stress advisory system in July 2023 to provide guidance to the public on prolonged outdoor activities. The Government has also reviewed sector-specific guidelines, for example for outdoor workers.⁷³ The Special Rapporteur highly encourages this and complementary measures that prioritize the workers' health and protect their rights.

85. Incorporating differentiated impacts and adopting an intersectional approach, as well as ensuring access to information and meaningful public participation, can greatly enhance the inclusion of diverse community needs and help guarantee collective well-being in the pursuit of a clean, green and blue city that harmonizes nature and people. During the visit, the Special Rapporteur observed that higher-income areas tended to benefit from better access to green spaces, more efficient public transport and cleaner air, while lower-income areas had comparatively fewer environmental amenities. Data were requested to confirm or deny this observation but none were available. A potential disparity underscores the importance of systematically documenting socioeconomic differences and integrating such data into urban planning and environmental policymaking. By doing so, Singapore can ensure that environmental benefits and protections are equitably distributed and that preventive measures are in place to avoid discrimination and environmental injustice.

IV. Conclusions and recommendations

86. **Singapore is the fourth-richest country in the world and the first in terms of human capital development, with impressive human capacity and expertise on sustainability, water management, long- and short-term planning and technology use. Concurrently, per capita carbon emissions and consumption-related emissions are among the highest globally, especially in industrial sectors. Impacts from climate**

⁷⁰ See <https://www.moh.gov.sg/others/resources-and-statistics/action-plan-for-successful-ageing/>.

⁷¹ See <https://www.mom.gov.sg/foreign-workforce-numbers>.

⁷² See <https://www.population.gov.sg/our-population/population-trends/overall-population>.

⁷³ See <https://www.nea.gov.sg/media/news/news/index/new-heat-stress-advisory-launched-to-guide-public-on-minimising-risk-of-heat-related-illnesses>.

change, biodiversity loss and toxic pollution are already affecting health, human rights and the economy, with increasing risks, particularly for those in vulnerable situations.

87. Hence, Singapore should prioritize reducing emissions and consumption, centring on the well-being of people and the planet, considering planetary limits and implementing the customary international law obligation to prevent environmental harm, including in areas beyond national jurisdiction. This is crucial also for being a city in nature and a global role model for sustainability.

88. Therefore, ongoing government efforts should be complemented and strengthened, including by:

(a) Recognizing and implementing the human right to a safe, clean, healthy and sustainable environment in the national legal framework and through the ASEAN plan of action with effective actions;

(b) Mainstreaming human rights- and ecosystem-based approaches into long-term planning, the Master Plan and further planning, ensuring alignment with its international obligations and coordination with national climate and environmental strategies, such as the Green Plan. Planning should adopt an intersectional approach, recognizing the differentiated impacts faced by people and groups in more vulnerable situations, such as children, older persons, women, persons living in poverty and workers, from climate and environmental degradation and thus ensuring that environmental improvements are equally shared;

(c) Regulating environmental, social and human rights impact assessments and undertaking them in a comprehensive way, aligned with international law principles, for all projects that might cause significant environmental, climate, social or human rights harms, including development- and climate-related harms, and guaranteeing access to information, public participation and access to justice;

(d) Complementing ongoing water management efforts with effective regulation and monitoring of industry use and demand for water, especially regarding water-intensive sectors and the use of new technologies, including data centres, and for cybersecurity, to further guarantee safe and sufficient water;

(e) Advancing efforts towards improving clean air for all by:

(i) Further considering the health risks and impacts of air pollution, compounded by climate change, especially on children, older people, women, workers and persons living in poverty;

(ii) Preventing transboundary haze and strengthening the implementation of the regional agreement, improving effective preventive actions and advancing investigations and the accountability of those responsible for these situations;

(f) Ensuring a safe climate by:

(i) Increasing climate action and including key sectors such as aviation and shipping in national inventories and climate policies in addition to ongoing international coordination efforts;

(ii) Aligning national targets with the Paris Agreement 1.5°C maximum temperature limit, considering the best available science, increasing the use of natural solutions and using traditional knowledge;

(iii) Ensuring that complementary initiatives, such as carbon pricing and offsetting, do not replace emissions reduction and that all climate action respects human rights;

(g) Protecting healthy ecosystems and biodiversity by:

(i) Continuing and strengthening protection, including through marine protected areas, while ensuring that coastal communities' rights are respected, for example with co-management and integrating traditional knowledge into the management of nature reserves;

- (ii) Ensuring that all significant impacts on ecosystems and biodiversity from projects and activities, such as land reclamation and energy-related and infrastructure projects, are effectively prevented and impacts are adequately remedied;
 - (iii) Implementing multilateral agreements, including the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, and collaborating with other States to do so, to protect the ocean, including areas and biodiversity beyond national jurisdiction and other key areas;
 - (h) Guaranteeing healthy and sustainably produced food by:
 - (i) Reducing food waste and plastic use in food systems;
 - (ii) Strengthening sustainable food systems by supporting local production and increasing locally produced food while promoting environmentally responsible imports, and promoting diverse approaches such as agroecology, supporting community-led food initiatives;
 - (i) Reducing toxicity in environments by:
 - (i) Reducing plastic use through a whole-of-society approach, regulations, control and education, highlighting the benefits of reducing fossil fuels dependency, improving clean air and increasing efficiency of the landfill in Semakau Island;
 - (ii) Promoting waste reduction, reuse and circular economy practices, while ensuring that hazardous and industrial waste are adequately treated;
 - (j) Regulating procedural environmental rights, including access to information, public participation and access to justice and remedy, aligned with international principles, implementing the ASEAN Declaration on the Right to a Safe, Clean, Healthy and Sustainable Environment as a minimum standard, and establishing clear binding provisions that guarantee timely, accessible and comprehensive public access to environmental information, including environmental impact assessments, priority projects and climate-related data for children, youth and others;
 - (k) Adopting clear regulations and guidelines that ensure a safe environment for youth and environmental human rights defenders to participate and express their views without fear of retaliation, and ensuring that their role is fully valued and respected;
 - (l) Advancing measures to further regulate and monitor private and public actors, including by:
 - (i) Strengthening business regulations and oversight, especially for those whose activities are connected to climate drivers, biodiversity loss and toxic pollution, and enforcing regulations to prevent, mitigate and remedy their impacts;
 - (ii) Requiring regular disclosure of environmental and climate-related information from private actors, including reporting on business activities, value chain impacts and climate actions;
 - (m) Preventing greenwashing, promoting corporate accountability and ensuring access to justice in cases of environmental harm.
89. The Special Rapporteur recommends that Singapore continue the dialogue and collaboration with her and other mandate holders and United Nations entities to explore further collaboration that can benefit Singapore and elsewhere through the possibility of sharing lessons learned and achievements.

Certificate of Annexure

No. VID1357 of 2025

Federal Court of Australia

District Registry: Victoria

Division: General

FRIENDS OF AUSTRALIAN ROCK ART INC

Applicant

MINISTER FOR THE ENVIRONMENT AND WATER AND ANOTHER

Respondents

This is the annexure marked **DB-10** produced and shown to David Burke at the time of affirming his affidavit on 27 April 2026.



.....
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SPECIAL PROCEDURES
UNITED NATIONS
HUMAN RIGHTS COUNCIL

End of Mission Statement at the conclusion of the country visit to Ireland

**Astrid Puentes Riaño, United Nations Special Rapporteur on the human right to a clean, healthy and sustainable environment
February 9 - 20, 2026**

Dublin, 20 February 2026

Today, I conclude my country visit to Ireland, the first one by a United Nations Special Rapporteur on the human right to a clean, healthy and sustainable environment, and the first visit to the country by any UN independent expert since 2018.

I am deeply grateful to the Government of Ireland for the invitation and for its cooperation extended to my mandate in the planning and implementation of the visit. Meetings included the Department of Climate, Energy and the Environment; the Department of the Taoiseach; the Department of Foreign Affairs and Trade; the Department of Health; the Department of Children, Disability and Equality, the Department of Agriculture, Food and the Marine; the Department of Housing, Local Government and Heritage; and the Department of Enterprise, Tourism and Employment. I also met with the Environmental Protection Agency, the Teagasc, the Irish Human Rights and Equality Commission, the Just Transition Commission and the Attorney General's Office. Meetings were also held with representatives of Ireland's High Court and Members of Parliament (Oireachtas), and the City Councils of Galway and Cork.

The visit further included meetings with academics, representatives of civil society, youth, environmental human rights defenders and the business sector, who shared their expertise, views and life stories. Site visits included to the vicinity of the Aughinish Alumina refinery in Limerick, a dairy farm in Cork and to the vicinity of the Grange Castle Business Park that hosts data centres in Dublin.

My deepest gratitude goes to the people of Ireland for their warm reception, and for their openness and generosity in sharing their knowledge, expertise and experiences on the human right to a healthy environment. This end of mission statement includes preliminary conclusions which will contribute to the improvement of protecting this human right and the interconnection with others, towards the wellbeing of the whole of society, including present and future generations.

The statement focuses on priority issues related to the importance of coherent policies and their implementation, key aspects of safe and sufficient water, ecosystems, biodiversity and climate, as well as legal proposals that might impact public participation and access to justice. A full report will be presented to the United Nations Human Rights Council in March 2027.

Overview

Ireland became a parliamentary republic in 1949. It has a ceremonial president, an executive power exercised by a Taoiseach and cabinet accountable to parliament. Ireland joined the European Union (EU) in 1973 which has been central to its political and economic development. The population of around five and half million people is concentrated on the Eastern side of the island, particularly around Dublin, while Western regions remain more rural.¹

Europe's second largest island, Ireland is a small and open EU member State with a highly globalized and export-driven economy, ranking among the world's wealthiest countries by GDP per capita but with an

¹ [Key Findings Population and Migration Estimates, April 2025 - Central Statistics Office](#)

Average Individual Consumption at average in Europe, while housing, healthcare, childcare, insurance, and energy costs are above the norm in Europe.² Its public finances rely heavily on multinational tax revenues and is substantially dependent on foreign direct investment especially in high-value sectors like pharmaceuticals, information and communications technology, and medical technology.³ The service sector, including finance, insurance, tourism and technology and digital services, accounts for over 60% of the GDP, and about 78% of the labour force. The industry sector accounts for about 18% of the active working population and around one third of the GDP, including pharmaceutical, biotechnology and medical services, led by multinational companies. The agriculture sector employs about 4% of the labour force, contributing to about 0.9% of the GDP, including dairy and beef, and 90% of its products are exported.⁴

International Law

Ireland has signed 16 international human rights treaties, with four currently pending ratification. The only core human rights treaty that Ireland has not yet signed is the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families. Also pending ratification is the Optional Protocol (OP) to the International Covenant on Economic, Social, and Cultural Rights.

In 2012 Ireland ratified the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention),⁵ as well as most internationally relevant environmental treaties and agreements. Ireland is part of the UN Convention on the Law of the Sea and was one of the pioneer countries signing (2023) and ratifying (2025) the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Agreement).

Even though express recognition of the right to a healthy environment nationally is pending, Ireland has played an active role in advancing its international recognition, including through its support for UN resolutions recognizing this right. Also worth mentioning is that both the UN Convention on the Rights of the Child and UN Convention on the Elimination of All Forms of Discrimination Against Women through General Comments have interpreted that the right to a healthy environment is fundamental and included in the human rights of children and women, respectively. I strongly recommend using these as interpretation criteria nationally.

The International Court of Justice's (ICJ) advisory opinion on the Obligations of States with regards to climate change, rendered in July 2025⁶ is key for clarifying and advancing Ireland's obligations on climate change. It concludes that the human right to a healthy environment is a precondition for the enjoyment of all other human rights, including the right to life and health, and that the right to a healthy environment is a result of the interdependence between human rights and the environment. The ICJ also clarified that all States have the obligation under customary international law to protect the environment and the climate system, and thus, to implement effective actions to avoid harms, including transboundary ones, related to mitigation, adaptation and restoration. It highlights that States must act with strict due diligence in relation to the environment and the climate system, derived from the high risk that harm to it can imply.

Ireland's upcoming Presidency of the Council of the EU (July–December 2026) presents a key opportunity to influence EU priorities on environmental, climate and human rights related matters. Irish leadership can and should contribute to advancing coherent measures, preventing further regressions and increasing ambition towards solving the climate change, biodiversity loss and toxic pollution, preventing further harms to human rights, the societies and the economies, in a historic moment.

² [Ireland's GDP is a mirage](#)

³ [Ireland – GKToday](#)

⁴ [Ireland: economic strengthen amid uncertain times, National Treasury Management Agency, May, 2025](#)

⁵ [Aarhus Convention](#)

⁶ [Obligations of States in respect of Climate Change](#)

Legal and Institutional Framework

Ireland's constitution recognizes its commitment to have human rights at the heart of national and foreign policy.⁷ Its environmental protection is implemented through a combination of constitutional provisions, statutory measures, administrative regulation, and policy instruments, along with EU law, while it has not yet recognized the right to a clean, healthy and sustainable environment as a constitutional right.

The Supreme Court's decision in *Friends of the Irish Environment v. Government of Ireland* confirmed that a right to a healthy environment is not currently protected under the Constitution, nor is it a derived right yet recognized by the Court.⁸ A constitutional recognition of the right to a healthy environment would strengthen the protection of fundamental human rights by linking environmental harm directly to impacts on health, dignity, equality, and intergenerational justice. It would provide a coherent rights-based framework to address both climate change and biodiversity loss, ensuring that public decision-making consistently prioritises people, nature, and the public interest.

Environmental legislation in Ireland, is mostly derived from EU law and regulates key dimensions such as waste management, nature protection, chemicals, air quality, the environmental effects of agriculture and industry, and pollution of waterways. Key statutes include the Environmental Protection Agency Act, establishing the EPA as an independent regulator; the Climate Action and Low Carbon Development Acts, providing the statutory framework for climate governance. There is also ample legislation, regulations, policies and strategies regarding water pollution, waste management, air quality, chemicals, and industrial emissions; and the transition to a circular economy. Environmental governance responsibilities are distributed across multiple departments, agencies, and local authorities.

One common challenge identified during my visit is a fragmented approach to policy development and often lack of common priorities or inconsistency in policies preventing effective implementation of legislation, including those related to the protection of human rights and the environment. Coordinated planning and cross-sector collaboration are essential to ensure that policies are consistent, resources are used effectively and to enable better protection of human rights. Such efforts will be highly beneficial in making sure that there is a whole of society approach, based on human rights and ecosystem approaches.

It was also mentioned during my visit that coordination on transboundary issues can be difficult and compromise ongoing efforts to further protect the environment. In this regard, Ireland could further benefit from a greater utilisation and strengthening of existing treaty bodies such as the North-South Ministerial Council under the Belfast/Good Friday Agreement (1998), to develop consultation, co-operation and action within the island of Ireland to amongst other address transboundary issues.⁹

Recently the European Commission called for a simplification of administrative burdens in EU environmental legislation, which should not be at the expense of human rights and the protection of the environment.¹⁰ As similar "simplification" initiatives have been proposed in Ireland, I underscore that any of such changes must fully comply with international and regional human rights obligations. Reviews to regulations must be guided by a human rights-based approach and explicitly integrate the human right to a clean, healthy and sustainable environment, considering its interdependence with other rights, including the rights to life and health, as mentioned above and recognized by the ICJ. These proposals must also be centered on the rights of present and future generations, while also considering differentiated and disproportionate impacts on marginalized individuals and communities.

I reiterate that regulatory reform must not undermine the rule of law or weaken protection mechanisms established to safeguard the public interest, nor should a misunderstood simplification process be allowed to increase potential risks to the environment and human rights, including regarding life and health. Rather,

⁷ [Human Rights In Ireland | DFA | Ireland.ie](https://www.dfa.ie/en/our-work/human-rights/human-rights-in-ireland/)

⁸ [Judgments | The Courts Service of Ireland](https://www.courts.ie/courts-service/judgments/)

⁹ [North South Implementation Bodies | North South Ministerial Council](https://www.nsmc.ie/north-south-ministerial-council/)

¹⁰ [ENNHRI, Response to the EU call for evidence on the simplification of administrative burdens in environmental legislation \(2025\).](https://www.enhri.eu/en/response-to-the-eu-call-for-evidence-on-the-simplification-of-administrative-burdens-in-environmental-legislation-2025)

Ireland, as other States, must ensure adequate regulation, oversight, and monitoring of both public and private actors to prevent human rights harms. These efforts should further be situated within the framework of the triple planetary crises—climate change, biodiversity loss, and toxic pollution—acknowledging their cumulative impacts on the enjoyment of human rights. Through regulatory reform processes, States should guarantee effective access to information, meaningful public participation, and access to justice and remedy, according to international human rights standards.

Furthermore, and considering the important role of businesses and particularly of multinational companies in Ireland, I wish to highlight that States have the obligation to regulate and effectively monitor business activities operating under their jurisdiction.¹¹ This is especially so in relation to activities that might have impacts on climate change, as clarified by the ICJ advisory opinion regarding the obligation to adopt standards and legislation that adequately protect the environment and the climate system, in relation to Ireland and throughout global value chains.

Additionally, considering the chilling effect that international trade agreements' Investor State Dispute Settlement mechanisms have had on effective environmental and climate protection internationally, Ireland should advance its withdrawal from the Energy Charter, and avoid signing further trade agreements as that might prevent advancing its climate and environmental commitment, noting the enormous compensation claims associated with the Lansdowne and Predator-cases.

Regarding the elements of the Right to Healthy Environment

The human right to a clean, healthy and sustainable environment is a compound right and its content includes substantive elements that include clean air, safe climate, healthy ecosystems and biodiversity, safe and sufficient water, healthy and sustainable produced food, and non-toxic environments; and procedural elements, which are access to information, public participation and access to justice. These elements are interconnected; therefore, the implementation of programmes, policies and projects must be done with a holistic, intersectional, integrated and comprehensive approach.¹²

Procedural rights for environmental protection: access to information, public participation and access to justice

The Aarhus Convention establishes that Parties must ensure that the public has access to information, public participation and access to justice.¹³ Advances have been made in Ireland since the 2012 ratification related to all these rights. However, regressive measures related to procedural environmental rights, including regarding regulations and fees for judicial review risk further advances being made, while increasing threats to the environment and the climate system are also of concern, as will be described below.

Based on the Access to Information on the Environment (AIE) Regulations 2007-2018,¹⁴ information held by, or for, public authority should be provided by any person that requests it. The process is regulated and certain information can be rejected, in which case, an appeal process is available. Increasingly, information related to the environment, including policies, research and assessments has been made accessible to the public, including on air quality monitoring. While information including the licensing process is public, there are some sectors or activities in relation to which there is little information despite the importance for the environment and climate, such as in the case of data centres.

Ireland has public participation mechanisms, such as the Citizens' Assemblies and consultation processes related to planning and regulations. Consultation and participation is recognized as an important aspect for environmental management, by environmental policy, such as Ireland's Marine Strategy and the Rural

¹¹ [Guiding Principles on Business and Human Rights](#)

¹² [A/79/270](#)

¹³ [Aarhus Convention](#)

¹⁴ [Access to Information on the Environment \(AIE\)](#)

Policy 2026-2031. Participation mechanisms include committees or advisory groups formed by relevant stakeholders, consultations on key policy decisions and workshops or seminars.

Often public consultations are inaccessible, technical, or timelines are too short, as mentioned by organizations, youth groups and entities during the visit and in their submissions. Even when consultations happen, and in cases where there have been thousands of submissions, rights holders mention that commonly these submissions are not considered in the final decision, and rarely an explanation of why was or not taken into consideration is included in the decisions. Another challenge identified is on occasions short notice or consultations open during end of the year or holidays, which makes it difficult for the public to learn about the processes and participate effectively. These situations result in diminishing trust and disincentive to participate due to the inadequate or lack of consideration in the final decision. Challenges related with effective participation have also been recognized by the government, as reflected in Ireland's State of the Environment Report 2024, citing the OECD.¹⁵

The Planning and Development Act 2024, presents challenges because of its potential incompatibility with the Aarhus Convention. The UNECE Aarhus Convention Compliance Committee recently raised concerns related to the review of the PDA, though some were addressed, remaining open ended language in the act might imply restrictions to access to information and public participation in relation to applications, extension or revoke of existent permissions.¹⁶

National law provides for judicial review of administrative decisions in the areas of planning, legislation and environmental impact assessments, which is an essential element of the right to access to justice in environmental matters. This has allowed the public to bring decisions or cases related to their rights and the environment to the attention of the courts, including related to projects, planning decisions and climate policy.

An essential element of access to justice is to make sure that judicial review is not "prohibitively expensive" as mandated by Aarhus Convention article 9. Ireland's judicial processes are rated as one of the costliest in the EU, while investment in the judicial system (including the number of judges) is significantly below the European average. As improvements have been made over time, including on standing and reducing times of the judicial review processes, recent proposals for judicial review contained in the General Scheme of the Civil Law Reform Bill 2025 may be regressive, can risk undermining those improvements and thus, reduce access to justice and limiting also the possibility of citizens to defend their rights and advance their rights and accountability.

Some proposals aim to limit access to judicial review, increase court fees and reduce options for recovery of legal costs when a party is successful in a case. A particular concern is proposals to amend section 50B of the Planning and Development Act, 2024. While advancing key infrastructure and planning decisions is of vital importance, it is also essential that these are done while complying with human rights and democratic obligations, including adequate and comprehensive environmental, social and human rights assessments, ensuring such processes are subject to effective information, public participation and access to justice. It is important to consider that effective judicial oversight can help the government to identify potential inadequate evaluations and as it's the judicial review's main objective, improve those decisions. This is especially important in relation with the protection of the environment and the climate system, particularly in a context of climate change, biodiversity loss and toxic pollution. In that sense, rather than reducing judicial review, the State should strengthen capacity both for planning and judicial systems, must make sure that all decisions, planning and projects are adequately and effectively assessed, considering best available science, and an ecosystem and human rights-based approach.

From information received during my visit, there are priority projects related to flooding defence and waste sewage treatment that experience delays in their planning processes due to lack of capacity by the planner

¹⁵ [State of the Environment Report – Chapter 16: Environmental Policy Implementation and Performance](#)

¹⁶ UNECE, 'Report of the Compliance Committee on decision VII/8i of the Meeting of the Parties concerning compliance by Ireland' ECE/MP.PP/2025/55 (November 2025), paras 67-77.

authorities, though unrelated to judicial reviews. Because of that, it is important to strengthen the Government 's human and financial capacities, to ensure effective mechanisms to guarantee the three pillars of the Aarhus Convention, as essential for environmental governance.

Substantive elements of the right to a healthy environment

As indicated in the 2024 EPA State of the Environment Report from 2024 Ireland scores low in all the areas: Climate, Air Quality, Nature, Water and Waste.¹⁷ Therefore addressing the drivers that are threatening elements of the environment should be prioritized. To do so, implementing a consistent and comprehensive whole of society approach can help to achieve it.

Safe climate

Climate change poses one of the most significant threats to the enjoyment of human rights in Ireland, including the right life, health, housing, water, food, and the right to a healthy environment. Ireland is already experiencing climate impacts, such as increased flooding, more frequent and intense storms, coastal erosion, droughts and infrastructure disruption. These impacts disproportionately affect older persons, persons with disabilities, low-income households, children and communities in rural, coastal, and flood-prone areas, evidencing the importance and urgency to advance climate action, including on mitigation, adaptation and remediation of damages.

Ireland was one of the first countries in the world to ban oil exploration (2019) and gas exploration (2020). Ireland has established a statutory framework for climate governance through the Climate Action and Low Carbon Development (Amendment) Act 2021, which introduced legally binding carbon budgets and sectoral emissions reduction targets. There is a legislative framework with annually revised [Climate Action Plans](#), to align with the country's 2030 net emissions reduction target of 51% (compared with 2018) and reach climate neutrality by 2050.¹⁸

However, official projections indicate a substantial shortfall, raising concerns about compliance with national and EU law,¹⁹ a challenge also stated by the European Commission.²⁰ A 2% decrease in GHG emissions in 2025 shows slowing down on climate action. The Climate Change Advisory Council recently reported that Ireland is set to overshoot its first carbon budget (2021-2025) by about 10 Mt.²¹

Moreover, decisions such as the EU nitrates derogation, and the Government proposals for new liquefied gas infrastructure to be used as Strategic Gas Emergency Reserve, and lifting the Dublin Airport passenger cap, are yet to include adequate, comprehensive and scientifically based assessments of environmental and climate impacts. Contradicting policies and exclusion of climate and environmental considerations create uncertainty even among economic sectors, in addition to increased risks.

The Coolglass ruling on 5 February 2026 clarified that under the *Climate Action and Low Carbon Development Act 2015*, public bodies, including planning authorities, must consider climate objectives when making decisions. The Supreme Court confirmed this obligation is legally binding. The decision provides clarity on decision-makers' responsibilities in Ireland and its implications for development and planning.

¹⁷ [Ireland's State of the Environment Report 2024 | Environmental Protection Agency](#)

¹⁸ [Ireland – Climate Performance Ranking 2026 | Climate Change Performance Index](#)

¹⁹ Climate Change Advisory Council. 2025. 'Annual Review 2025 – Cross Sectoral Review' [Annual Review and Report | Climate Change Advisory Council](#)

²⁰ [European Semester 2025 Country Report – Ireland](#)

²¹ Climate Change Advisory Council. 2025. 'Annual Review 2025 – Cross Sectoral Review' [Annual Review and Report | Climate Change Advisory Council](#)

Recent international legal developments underscore States' duties to align energy policies with human rights and climate science. The ICJ explicitly states that permitting fossil fuel expansion, granting exploration licences, or providing subsidies may constitute an internationally wrongful act.²²

As recommended in my last report to the UN General Assembly, "States should abstain from excluding potentially harmful sectors or projects from impact assessment requirements based on strategic, national security, national interest or climate and biodiversity measures, including projects related with fossil fuels and their related activities, industrial activities such as fisheries, agribusiness, mining and climate-related activities".²³

Transport and agriculture remain the largest sectors of emissions. Important efforts have been put in place for better inventories and reduction emissions, though not at the ambition level required. The agricultural sector's emissions correspond to 38%, with a reduction target of 25%. While transport emissions constitute over 20% of total emissions with a 50% reduction target by 2030, sectoral emissions continue increasing, with projections to exceed its sectoral emission target. While there are some efforts to increase active transportation and public transport, the country still highly depends on private cars, with increasing needs for effective and sustainable public transport and infrastructure. Recently it has been announced that the 2007 Dublin airport passenger cap of 32 million would be removed through legislation and is being taken based on intentions to increase connectivity and the economy, without considering climate impacts nor comprehensive assessment on economic growth either.

Another concern raised during the visit is the existence and expansion of data centres, due to its impact on energy and water use,²⁴ the potential increase of emissions and lack of information from communities. Ireland is one of the most data centre-dense countries in Europe. Data centres currently consume more than 20 percent of electricity²⁵ and are projected to use more electricity than all households by 2027.²⁶ If Ireland were to connect all proposed data centres to the electricity grid, it would not meet its targeted 51 percent emissions reduction by 2030.²⁷ The Large Energy User Action Plan approved by the Government in January 2026, seeks to align future large energy user development with Ireland's renewable energy resources.

The cumulative climate impact of new data centres in Ireland must be assessed alongside all recent and proposed developments, as their carbon emissions are not limited to the site itself and limit progress toward national carbon budgets. The 2022 Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy is the first national policy on data centre development, and it does not include an integral consideration of climate impact of data centre energy demand. The Irish Government published its Large Energy User Action Plan in January 2026, setting out their approach to planning sustainable new energy intensive industrial developments including Data Centres. It builds on the 2022 Statement, and maintains the intention of prioritising co-location with renewables. Being an important goal, the pace at which renewable energy has been advanced and the increasing need from the industry and the potential use of other energy sources, such as gas, should be considered to make sure that climate targets are not further impacted.

Regarding risks, Ireland's first National Climate Change Risk Assessment was done in 2025 and provides a comprehensive national overview of the potential risks and opportunities posed by climate change for Ireland. It identifies 115 potential risks and 43 significant risks.²⁸ The risk assessment is an important

²² <https://www.icj-cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf>.

²³ [A/80/187: Report of the Special Rapporteur on the human right to a clean, healthy and sustainable environment, Astrid Puentes Riaño](#)

²⁴ Water use by data centres in Ireland is ~0.13% of Uisce Éireann's annual supply.

²⁵ Central Statistics Office, [Data Centres Metered Electricity Consumption 2024](#) (2025)

²⁶ Climate Change Advisory Council, [Annual Review 2025: Electricity](#) (2025) p. 16.

²⁷ 2026 [Climate Change Performance Index](#) (CCPI). The CCPI experts note that "Although new regulations have been proposed for data centre locations, grid connections, and on-site generation, the energy regulator's dismissal of climate obligations, coupled with the government's continued support for new data centre construction, risks increasing reliance on gas-fired electricity generation. The demand from these centres also is outpacing the development of new renewable energy sources and pushing up electricity costs"

²⁸ [National Climate Change Risk Assessment | Environmental Protection Agency](#)

advancement and there is a need to produce data considering differentiated impacts in order to support prevention, preparedness and response to extreme weather events in Ireland. This information can enable the ability to evaluate and learn previous events and leads to preventable adverse health outcomes – particularly for persons and communities already vulnerable.

The Government informed that a National Climate Change Risk Assessment including ten Sectoral Adaptation Plans for thirteen key sectors were developed under the 2024 National Adaptation Framework.

Safe and sufficient water

“A river runs through us, no matter where in Ireland we may be. There will always be a stream, a river, a ditch nearby, leading to a larger channel of water and finally to the sea”. Eithne Massey

Water and rivers are essential for Ireland, profoundly linked with and interconnecting healthy ecosystems and biodiversity, determining healthy food systems, safe climate and non-toxic environments. Simultaneously, water quality represents one of the most persistent environmental issues in Ireland. Currently 52% of surface waters, including rivers, lakes, and coastal waters, meet European Union ecological standards, while 48% fail to do so, despite legal obligations to protect and restore aquatic ecosystems.²⁹ The Environmental Protection Agency’s latest water quality reports show that the proportion of waters in satisfactory condition has decreased since assessments began in 2007.³⁰ Elevated nitrogen and phosphorus levels-largely due to the agricultural sector, hydro morphology, forestry and urban wastewater discharges are the main causes behind water in non- satisfactory condition.³¹

As of 2024, untreated sewage from the equivalent of 40,000 people in 16 villages and cities, such as Galway, was still discharged directly into rivers, lakes, and coastal waters daily due to deficits in wastewater treatment infrastructure.³² The EU Urban Wastewater Treatment Directive sets standards and monitoring requirements for the collection and treatment of wastewater discharges from urban areas, which is pending to be fully implemented. Ireland’s failure to meet obligations of the Urban Waste Water Treatment Directive have been brought to the Court of Justice of the EU, as compliance on some conglomerates have been improved, others are still pending to be complied with,³³ evidencing the link with human rights protection and the obligation of States.

Incidents such as the massive fish kill in Munster Blackwater, the largest in Irish’s recent history,³⁴ evidence the urgency of identifying and implementing measures to prevent these situations and ensuring that adequate response arrangements are in place. Especially as climate impacts can exacerbate the risks and impacts of situations like this one as pointed out in the European Commission’s Joint Research Centre (JRC)’s review of the case. In August 2025, an estimated 32,000 salmon and brown trout died when it is believed that an unknown environmental irritant entered the Munster Blackwater. Inter-Agency investigations found no definite cause, while authorities reported that dead and ailing fish were only noticed days after the likely contamination happened, which made it more difficult to identify the contamination sources.³⁵ The JCR concluded on 11 February 2026 that there had been a 'detection gap'.³⁶ The Commission recommended that “major rivers should have continuous monitoring with current and historical results available and downloadable online on a centralized website.”³⁷ A recommendation to prepare, agree and test a multi-agency protocol for major fish kills, including comprehensive sampling of the river and

²⁹ [Water quality has improved in some areas but continues to decline overall | Environmental Protection Agency](#)

³⁰ [Ireland's State of the Environment Report 2024](#) p191.

³¹ [Nearly Half of Irish rivers are polluted by nitrogen - EPA](#)

³² [Two decades is too long to wait to fix Ireland’s deficient wastewater treatment plants, says EPA.](#)

³³ [Commission decides to refer Ireland to the Court of Justice of the European Union for failing to comply with EU rules for treating urban water, December, 2025](#)

³⁴ [Rivers must be monitored continuously to prevent ‘repeat of Blackwater fish kill’ – The Irish Times](#)

³⁵ [Inter-agency Report, Summary Report of the Investigation into Fish Mortalities in the Munster Blackwater August-September 2025.](#)

³⁶ [JRC Publications Repository - The 2025 major fish kill on the Munster Blackwater, Ireland. Organisational responses and key recommendations.](#)

³⁷ Ibid.

discharging facilities in the catchment. Public information is also vital; thus the Commission recommended that communications should focus on immediately passing on “knowledge, specifying any uncertainties, investigative steps being taken and give immediate advice for the public.”

On 22 December 2025, the European Commission approved a new three-year extension of Ireland’s Nitrates Derogation, Ireland being the only country to have it. While the EU nitrates limit³⁸ was established to protect water quality and prevent nutrient pollution, the continued reliance on derogations continues to affect water quality.³⁹ The decision has a requirement for a comprehensive environmental impact assessment that is pending. This issue was constantly mentioned in meetings by multiple stakeholders, evidencing the importance, interest and the need for further clarity and monitoring of its implementation, including regarding potential immediate and cumulative impacts of agricultural intensification on aquatic ecosystems. As explained above, authorities need to continually make sure that adequate measures, including regulations and monitoring, is in place, in relation to activities that might increase environmental and climate harm, acting with stringent due diligence.

Existing challenges are being further compounded by emerging pressures on water resources, notably the rapid expansion of data centres, which require significant volumes of water for cooling and generate additional wastewater requiring treatment. Without integrated, forward-looking planning, such developments risk placing additional strain on already overstretched water abstraction and treatment systems, aggravating their impact and risking the loss of ongoing efforts to improve rivers and water basins.

Clean Air

Breathing clean air is indispensable for everyone. Ireland’s regulation of the use of smoky fuels for residential heating including smoky coal, turf and wet wood has greatly improved its air quality, and thus, improved human health. Yet, air quality remains a significant public health concern, with around 1,700 premature deaths annually primarily linked to PM_{2.5}.⁴⁰ Despite Ireland’s national solid fuel regulations research estimates that around 90% of sod turf comes from non-traded sources meaning that significant air pollution will remain in some areas of the country still affecting people’s health.⁴¹

The main cause of air pollutants in Ireland come from home heating, transport, agriculture and energy. The EPA uses real time monitors at over 100 stations around the country.⁴² Ireland’s governance over air pollution is based on the EU’s Ambient Air Quality Directive, which was revised in 2024 to strengthen air quality standards and to introduce provisions on access to justice and the right to compensation for damage to human health from air pollution.⁴³ The Directive should be transposed by the end of 2026, which is fundamental for further advancing improvements for clean air, protecting human rights and climate action as well. The annual limit values for the most harmful air pollutants, PM_{2.5} and nitrogen dioxide, still are double the limit values recommended by the World Health Organisation’s 2021 Air Quality Guidelines. Authorities shared during the visit strategies to implement - an important effort that should have the support and participation of all sectors.

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³⁸ [Nitrates - Environment - European Commission](#)

³⁹ [Early-insights-nitrogen-concentration-indicator-Jan-Jun-2025_F03-web-ready.pdf](#) and [Water quality has improved in some areas but continues to decline overall | Environmental Protection Agency](#)

⁴⁰ [Some 1,700 premature deaths attributed to poor air quality per year, says EPA – The Irish Times](#)

⁴¹ [Ireland's State of the Environment Report 2024](#), p 47

⁴² Ireland’s real-time network monitors particulate matter (PM₁₀ and PM_{2.5}) and inorganic gases: nitrogen dioxide and nitrogen oxides (NO₂ and NO_x), ozone (O₃), sulphur dioxide (SO₂) and carbon monoxide (CO) which are updated on www.airquality.ie hourly

⁴³ [Air quality: Council gives final green light to strengthen standards in the EU - Consilium](#)

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quality standards and to introduce provisions on access to justice and the right to compensation for damage to human health from air pollution.⁴⁵ The Directive should be transposed by the end of 2026, which is fundamental for further advancing improvements for clean air, protecting human rights and climate action as well. The annual limit values for the most harmful air pollutants, PM2.5 and nitrogen dioxide, still are double the limit values recommended by the World Health Organisation's 2021 Air Quality Guidelines. Authorities shared during the visit strategies to implement - an important effort that should have the support and participation of all sectors.

Healthy ecosystems and biodiversity

Healthy ecosystems and biodiversity are vital for all beings. Despite the importance of biodiversity and ecosystems for Ireland, also for historical and cultural reasons, biodiversity status is one of the worst in Europe. Many protected habitats are in unfavourable conditions. Ireland has amongst the lowest levels of forest land use in Europe, with only 10.5% of the country forested, while only 1% of this area is native forest.⁴⁶ The significant international and legal obligations to protect nature and biodiversity is recognized,⁴⁷ which is an important first step, while prioritizing its implementation is fundamental. The EU Habitats and Birds Directives have resulted in the creation of a network of sites for habitat and species protection with the Natura 2000 network. Despite these measures, nature and biodiversity continue to decline, with significant social, political, and economic consequences.⁴⁸

Ireland's 4th National Biodiversity Action Plan 2024-2030 is an all-of-government document and sets out the national agenda for protecting and restoring biodiversity. To date, 148 peatlands are designated as Natural Heritage Areas, with a further 630 proposed. Consistent information that I received during the visit allowed me to conclude that the unauthorised peat harvesting and extraction on an industrial scale is an important driver of Ireland's destruction of natural habitats and its biodiversity, also compromising the role of peatlands in the mitigation of the impacts of climate change, considering their role in carbon storage and flood mitigation. Thus, remaining peatlands need to be protected through strengthening of current efforts and further advance restoration of these areas, while stopping main drivers of their destruction. Hedgerows, which are dense rows of shrubs, trees, and other vegetation are also a crucial part of Ireland's cultural and natural heritage, and important for maintaining biodiversity and healthy ecosystems that should be protected.

Marine protection in Ireland remains far below international targets while economic activities are increasingly impacting the ocean. Marine areas are more than ten times the land mass of Ireland. In recent years, there has been a positive increase in attention given to marine areas and their biodiversity. In the wider marine area, the Marine Strategy Framework Directive is the main legislation in place to ensure that seas are clean, healthy, biologically diverse and sustainably used. As part of the EU Biodiversity Strategy for 2030, Ireland has committed to protecting 30% of its expansive marine and coastal area by 2030 (30x30) with at least 10% protected in fully or highly protected areas under consideration. The Government recently decided to incorporate a process for the designation of Marine Protected Areas in the Maritime Area Planning Act.⁴⁹ The Government should further submit its "overdue" national roadmap for phasing out destructive fishing in Marine Protected Areas including a ban on bottom trawling in accordance with the EU Marine Action Plan. Actions such as the prohibition of some trawling activity by fishing vessels approved in 2025 are important, and should be effectively implemented, including through transboundary coordination and collaboration with Northern Ireland and other countries.

Healthy and Sustainable Produced Food

Healthy and sustainable food implies that food production does not cause environmental nor human health harms and guarantees the protection of food systems. Ireland's Food Vision 2030 highlights the need to

⁴⁵ [Air quality: Council gives final green light to strengthen standards in the EU - Consilium](#)

⁴⁶ [National Forest Inventory, Republic of Ireland: Results | Forest Information System of Europe](#)

⁴⁷ [Irish Law | National Parks & Wildlife Service](#)

⁴⁸ [Ireland's State of the Environment Report 2024](#) p 160.

⁴⁹ [Ministers O'Brien and Dooley drive forward legislation to safeguard Irish Seas and streamline maritime planning](#)

balance environmental sustainability with economic growth in Irish agriculture.⁵⁰ Ireland's Climate Action Plan 2025 sets a target of 10% of the agricultural land area being organically farmed by 2030. Recent efforts to increase biodiversity on farms have been developed in a small percentage of farms, whose results will be important to monitor and document. Acknowledging the importance of these efforts, scientific independent assessments show that current progress falls short of what is required, which strengthens the need to increase advances to better protect the environment, including the water, soils and biodiversity, because as it was mentioned to me by farmers that I met with, they are also worry and already being impacted by environmental and climate impacts.

Agriculture covers a large share of land, and any pollutants or runoff from farms potentially affect watersheds and water catchments across the country, as mentioned above. While improvements in farm practices and better compliance with existing regulations—such as water protection rules and climate measures identified by Teagasc—could deliver significant benefits, deeper systemic change is necessary in the agriculture sector.

Up to 90% of Irish beef, dairy produce and sheep meat is exported each year. It is estimated that Ireland's farms produced enough food in 2024 to suffice the dietary protein requirements of 30 million people on a net basis, seven times the population. However, domestic consumption patterns and imports (particularly of fruit/vegetables) show that food diversity and self-sufficiency remain to be strengthened.

Non-toxic Environments

Waste management is governed by the Waste Management Act 1996, aligning Ireland with European Union directives. The National Waste Management Plan for a Circular Economy strengthens this framework by setting targets for reuse and repair and prioritising waste prevention and resource efficiency. A national bottle and can return scheme launched in February 2024 has improved material recovery and public participation. REACH provisions⁵¹ aim to reduce harmful chemical pollution.

Yet waste generation in Ireland continues to rise, particularly from construction activities. Ireland remains reliant on exporting waste for treatment. Capacity gaps, illegal dumping, and hazardous waste management pose ongoing risks to land, water, and public health.

During a site visit to Askeaton, Limerick I was informed of environmental and human rights concerns linked to Aughinish Alumina Ltd., particularly related to contamination of soil, water and air. Since the late 1980s local communities have reported serious detrimental impacts on both human and animal health. Although a major state investigation was carried out in the late 1990s, I was informed that this investigation did not properly assess the alumina plant as a potential causal factor, nor did it analyse exposure to highly toxic substances. The inquiry also omitted or lost key biological and environmental data. Independent scientific research later described the human health component of the inquiry as poorly designed and incapable of ruling out pollution-related harm. Affected families mentioned that they lost their livelihoods and suffered long-term health consequences. From information gathered during the visit, monitoring of the refinery has been done linked with the licence, though air pollution monitoring is not clear despite the evident risks the facility has and existing regulations do not include measures that assess the potential link of the refinery with impacts on human and environmental health. As the refinery's activities continue and its planning to expand its operations, while increased climate impacts poses additional risks to its operations, it is important that Ireland develops a thorough inquiry, considering both cumulative impacts of pollution on the people and the environment in the area.

Environmental Human Rights Defenders

During my visit I received information on environmental human rights defenders facing increased intimidation, media harassment, threats and personal targeting particularly in cases related to judicial

⁵⁰ [Food Vision 2030 – A World Leader in Sustainable Food Systems](#)

⁵¹ [Understanding REACH - ECHA](#)

review that might challenge economic interests.⁵² I was informed of situations in which government officials or members of the business sector have expressed that environmental human rights defenders are “against” projects, the economic development or the jobs that Ireland needs, which can constitute stigmatization and an undervaluation of their role, with a potential result of increased risks.

Strategic Lawsuits Against Public Participation (SLAPPS) seem to be on the rise in Ireland. A number of cases have been documented in which leaders and organizations aiming to protect the environment and human rights are put under enormous personal pressure merely for publicly participating in planning and environmental law matters. Inequalities in access to justice in such cases have also been raised.

Ireland is in the process of transposing the EU Directive on SLAPPS⁵³ mainly through the Defamation Bill. A transposition of a limited scope of the SLAPP directive may have a negative impact increasing potential risks against environmental, human rights defenders, while leaving them unprotected from potential SLAPPS, which is the objective of the directive. It is essential for the effective protection of environmental human rights defenders that robust measures on a legislative, regulatory and policy basis are introduced to counter the threat of SLAPPS. Human right defenders are prioritised in Ireland’s candidature for the Human Rights Council; and this commitment should be reflected in its approach in Europe and domestically.

Vulnerable and Marginalised Groups

Environmental and climate impacts affect everyone, although they disproportionately impact those in situations of vulnerability. Low-income households, rural and coastal communities, Traveller, migrant and minority communities, persons with disabilities, as well as children and older persons, experience heightened exposure to environmental risks and reduced capacity to adapt and recover.

Children and older persons are particularly vulnerable to the health impacts of air pollution and to extreme weather events linked to climate change. These harms overlap with other forms of social and economic exclusion and existent discrimination. The insufficient recognition of such intersectional vulnerabilities in environmental and climate policies raises serious concerns under international human rights law, including with respect to equality and non-discrimination and the rights of present and future generations.

I would like to express once more my sincere appreciation to the Government of Ireland for the invitation to undertake this visit and for its excellent cooperation both before and during it. This end-of-mission statement highlights my preliminary findings. A full report with a more detailed and comprehensive analysis will be prepared, including extensive recommendations, which will be presented at the 64th session of the United Nations Human Rights Council in March 2027.

⁵² [Taoiseach says An Taisce should not appeal court decision on cheese factory – The Irish Times](#)

⁵³ [Directive - EU - 2024/1069 - EN - EUR-Lex](#)

Certificate of Annexure

No. VID1357 of 2025

Federal Court of Australia

District Registry: Victoria

Division: General

FRIENDS OF AUSTRALIAN ROCK ART INC

Applicant

MINISTER FOR THE ENVIRONMENT AND WATER AND ANOTHER

Respondents

This is the annexure marked **DB-11** produced and shown to David Burke at the time of affirming his affidavit on 27 April 2026.



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Mandate of the Special Rapporteur on the human right to a clean, healthy and sustainable environment

TO THE AFRICAN COURT ON HUMAN AND PEOPLES' RIGHTS

ARUSHA, UNITED REPUBLIC OF TANZANIA

APPLICATION NO. 001/2025

IN THE MATTER OF A REQUEST BY THE PAN AFRICAN LAWYERS UNION FOR AN
ADVISORY OPINION ON THE OF STATES WITH RESPECT TO THE CLIMATE CRISIS

Made under Rule 84(2) of the Rules of the African Court on Human
and Peoples' Rights

*Amicus filed by Astrid Puentes Riaño, United Nations Special Rapporteur on the human right
to a clean, healthy and sustainable environment*

30 March 2026

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Executive Summary

The climate emergency, biodiversity loss and toxic pollution constitute the triple planetary crises, the greatest existential challenge of our time. These crises also represent enormous human rights challenges especially for marginalised people and communities. In this Advisory Opinion, this Court has the opportunity to clarify the obligations of African States in a way that is progressive, just, equitable, and tailored to the African region. The opportunity to foreground the challenges faced by some of the countries most affected by the climate emergency—and also those who have been afforded the fewest opportunities to shape international climate negotiations and law. Several other international courts have now addressed the climate emergency, clarifying its relationship to human rights protection and States’ international climate obligations. It is essential that this Court be among them and contribute with the African perspective on understanding of States’ obligations and the effective protection of human rights in the context of climate change.

The Court can clarify the responsibility of States, including those in Africa, that have contributed to these crises, and identify priority actions that they must implement in order to comply with their obligations under international law and human rights law. These obligations will become a fundamental, yet missing, and needed tool for States to understand the importance of advancing effective pathways to reduce and stop the dependency on fossil fuels, halt the environmental degradation, and advance a just transition and remediation, centred in human rights and an ecosystem perspective, towards just and sustainable societies and economies. As the science has shown, Africa is one of the regions most impacted by climate change, biodiversity loss, toxic pollution, and increased desertification, which are impacting and increasingly threatening human rights, societies and economies, even exacerbating conflicts and compromising the present and future of the region. The Advisory Opinion under consideration by this Court can help to clear a path towards the effective solutions needed.

I submit this brief in my capacity as the United Nations Special Rapporteur on the human right to a clean, healthy and sustainable environment (“**UN Special Rapporteur**”). This brief follows on from this Court’s *Notice on the Request for Leave to Act as Amici Curiae* of 28 November 2025, requesting to file an *amicus curiae* brief in the present proceeding.¹

This submission is intended to assist the Court in answering the questions raised in the *Request for an Advisory Opinion on the Obligations of States with Respect to the Climate Crisis, Advisory Opinion No. 001/2025* (“**Advisory Opinion Request**”). To do so I address four questions related with the interpretation and application of custom and treaty law regarding obligations of States in the context of climate change; obligations of States under human rights law; positive obligations of States related to people and groups in vulnerable situations; and responsibility of African States regarding violations by third parties. To that end, my contribution will be mostly based on international law, and as relevant, complemented with decisions and interpretations from regional

¹ *Notice on the Request for Leave to Act as Amici Curiae*, Request for Advisory Opinion No. 001/2025, Ref: AFCHPR/ADV.O/001/2025/005 (28 November 2025).

human rights systems. For clarity, this submission follows the questions as submitted to the Court, pointing out that analysis in this submission can be useful to address other questions not expressly included here.

In **section B.1.**, I describe the obligation of all States, under customary international law, treaty law, and human rights law, to protect the environment and the climate system, and the derived obligation to prevent harm. This is an *erga omnes* obligation that is also derived from the obligation of States to respect, protect and fulfil human rights. According to this duty, States must implement effective measures, including to prevent harms from activities due to public or private parties. In the context of climate change, these obligations include duties to mitigate greenhouse gases emissions, adapt to climate change and respond to loss and damage resulting from climate change. Based on these duties, States must act with stringent due diligence, decide based on best available science, including the maximum limit of 1.5°C of global warming, recognising that even at that limit there are serious and irreversible harms; and advance progressive actions, avoiding regressive ones.

Derived from these obligations, States must regulate activities from public and private actors that might cause harm, States must: act to prevent risks, and effectively monitor potentially harmful activities; undertake comprehensive environmental, social and human rights impacts assessments prior to authorising activities; enforce regulations; and aligned all these measures with principles of international law including the preventive and precautionary principles. States must also cooperate regionally and internationally, preventing transboundary and extraterritorial impacts as well. These obligations are subject to the principle of common but differentiated responsibilities and respective capabilities, a principle that recognises historic and current contributions to climate change, but not an excuse to act and implement effective and binding actions.

Section B.2. briefly explains obligations of States towards past, present and future generations, focusing on the status and content of the human right to a clean, healthy and sustainable environment as understood under international law, corresponding to Article 24 of the African Charter. This section describes the content and interrelation of the elements of the human right to a healthy environment, highlighting that these also are interlinked with other human rights, such as the right to life and health. This section also describes human rights duties in the context of climate-induced migration and displacement, the right to equality and non-discrimination, and the importance of intergenerational equity and obligations of future generations.

In **section B.3.** I analyse fundamental obligations in relation to marginalised people and groups, including environmental human rights defenders, children and youth, women and girls, Indigenous Peoples, peasants, pastoralists, small-scale fishers, older persons, persons with disabilities, and people living in situations of poverty. Finally, **section B.4.** addresses the responsibilities of African States in relation to violations by third parties, including regarding the duty to regulate, monitor and control private parties, undertake environmental, social and human rights impact assessments, and enforce regulations.

A. Expertise as the UN Special Rapporteur on the human right to a clean, healthy and sustainable environment

My role is part of “[t]he system of Special Procedures” that “is a central element of the United Nations human rights machinery and covers all human rights: civil, cultural, economic, political, and social”.² Special Rapporteurs serve as independent human rights experts and are selected for our “(a) expertise; (b) experience in the field of the mandate; (c) independence; (d) impartiality; (e) personal integrity; and (f) objectivity”.³ Special Procedures “undertake to uphold independence, efficiency, competence and integrity through probity, impartiality, honesty and good faith” and do “not receive financial remuneration”.⁴

In the performance of my mandate as Special Rapporteur, I have the legal status of an expert on mission for the United Nations, within the meaning of Articles VI and VII of the Convention on the Privileges and Immunities of the United Nations, adopted by the United Nations General Assembly on 13 February 1946. As such, I enjoy such privileges and immunities as are necessary for the independent exercise of my functions, including in respect of words spoken or written acts done in the course of the performance of my missions, including immunity from legal process of every kind.

This application is submitted voluntarily without prejudice to, and should not be considered as a waiver, express or implied, of the privileges and immunities of the United Nations, its officials and experts on mission, pursuant to the 1946 Convention on the Privileges and Immunities of the United Nations. I further clarify that authorisation for the position and views expressed herein, in full accordance with the independence afforded to my mandate, was neither sought nor given by the United Nations, the United Nations Human Rights Council, the Office of the United Nations High Commissioner for Human Rights, or any of the officials associated with those bodies.

As mentioned, my mandate forms part of the Special Procedures system of the United Nations Human Rights Council. UN Special Rapporteurs undertake country visits, act on cases of reported violations and infringements of human rights, contribute to the development of international human rights standards, and provide advice for technical cooperation. We coordinate with other Special Procedures, the Office of High Commissioner for Human Rights and report annually to both the UN Human Rights Council and the UN General Assembly.

The UN Human Rights Council created the mandate on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment in 2012 as an “Independent Expert”. In 2015, the mandate was turned into a Special Rapporteur and was most

² Office of the High Commissioner for Human Rights (“OHCHR”), *Special Procedures of the Human Rights Council*, <https://www.ohchr.org/en/hrbodies/sp/pages/introduction.aspx>

³ Human Rights Council, *Institution-building of the United Nations Human Rights Council*, A/HRC/RES/5/1 (June 18, 2007), https://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/RES/5/1

⁴ OHCHR, *Special Procedures of the Human Rights Council*

recently renewed by the Human Rights Council in 2024.⁵ The mandate includes studying the human rights obligations related to the enjoyment of a safe, clean, healthy, and sustainable environment in consultation with, among others, human rights mechanisms; promoting good practices in rights-based approaches to environmental policymaking; and advancing the recognition and implementation of the right to a clean, healthy, and sustainable environment. My term as the Special Rapporteur began in May 2024.

This mandate has been integral in the global recognition and development of the human right to a clean, healthy, and sustainable environment. In my reports over my almost two years as a mandate holder, I have: provided a global overview of the right to a healthy environment;⁶ analysed and clarified why ocean issues are also human rights issues,⁷ proposed a Framework for Environmental, Social and Human Rights Impact Assessments (ESHRIAs);⁸ and set out priority actions for the protection of air quality and the right to a healthy environment.⁹ I have also conducted two country visits, to Singapore in May 2024,¹⁰ and to Ireland in February 2026.¹¹ Previous UN Rapporteurs on this mandate have: developed principles and jurisprudence concerning the right to a healthy environment;¹² analysed the relationship between human rights and climate change;¹³ and led efforts which culminated in unopposed resolutions recognising the right at the UN Human Rights Council¹⁴ and the UN General Assembly.¹⁵

⁵ UN Human Rights Council, *Resolution 55/2: Mandate of the Special Rapporteur on the human right to a clean, healthy and sustainable environment*, UN Doc A/HRC/RES/55/2 (4 April 2024).

⁶ Astrid Puentes Riaño, *Overview of the implementation of the human right to a clean, healthy and sustainable environment*, Report to the UN General Assembly U.N. Doc. A/79/270 (2 August 2024) [*Implementation Report*]

⁷ Astrid Puentes Riaño, *The ocean and human rights*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/58/59 (31 December 2024) [*Ocean Report*].

⁸ Astrid Puentes Riaño, *Framework for environmental, social and human rights impact assessments and the right to a clean, healthy and sustainable environment*, Report to the UN General Assembly, U.N. Doc. A/80/187 (17 July 2025) [*ESHRIA Report*].

⁹ Astrid Puentes Riaño, *Priority actions towards breathing clean air, protecting public health and ensuring a healthy environment*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/61/47 (12 January 2026) [*Clean Air Report*].

¹⁰ Astrid Puentes Riaño, *Visit to Singapore*, A/HRC/61/47/Add.1 (12 January 2026).

¹¹ Astrid Puentes Riaño, *End of Mission Statement at the conclusion of the country visit to Ireland*, 20 February 2026.

¹² See for example John Knox (special rapporteur on human rights and the environment), *Framework Principles on Human Rights and the Environment*, Report to the UN General Assembly, U.N. Doc. A/HRC/37/59 (24 January 2018) [*Framework Principles Report*].

¹³ John Knox (special rapporteur on human rights and the environment), *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/31/52 (1 February 2016) [*Knox Climate Report*]; David Boyd (special rapporteur on human rights and the environment), *A safe climate*, U.N. Doc. A/74/161 (15 July 2019) [*Boyd Climate Report*].

¹⁴ UN Human Rights Council, *Resolution 48/13*, adopted on 8 October 2021: *The human right to a clean, healthy and sustainable environment*, U.N. Doc. A/HRC/RES/48/13 (Oct. 18, 2021).

¹⁵ UN General Assembly, *Resolution 76/300: The human right to a clean, healthy and sustainable environment*, U.N. Doc. A/76/300 (July 28, 2022).

The work of UN Special Rapporteurs on the human right to a healthy environment has been cited by courts and tribunals including the International Court of Justice,¹⁶ Inter-American Court of Human Rights,¹⁷ and the European Court of Human Rights.¹⁸ In Africa, previous UN Special Rapporteurs have made submissions to the Supreme Court of Appeal of South Africa,¹⁹ and conducted country visits to Botswana²⁰ and Madagascar.²¹

B. Questions addressed in the present intervention

This submission addresses the obligation of all States to protect the environment and the climate system, especially regarding the following questions presented to the Court in the Advisory Opinion Request:

- a. The interpretation and application of custom and treaty law concerning State obligations on climate change (question (b) in the Advisory Opinion Request);
- b. Specific State human rights obligations towards past, present and future generations affected by climate change (question (c) in the Advisory Opinion Request);
- c. Positive obligations of States to protect vulnerable populations, including environmental human rights defenders, Indigenous Peoples, women, children, the elderly, and people with disabilities (question (d) in the Advisory Opinion Request);
- d. Responsibilities of African States regarding violations by third parties operating within their jurisdiction (question (h) in the Advisory Opinion Request);

This brief will address each of the questions mentioned above in that order, describing obligations as understood under international human rights law and international law, including examples from regional systems as relevant.

¹⁶ See for example International Court of Justice, *Obligations of States in respect of Climate Change*, 23 July 2025 [ICJ Advisory Opinion] at para. 391.

¹⁷ See for example Inter-American Court of Human Rights, *Environment and Human Rights*, Advisory Opinion OC-23/17, Series A No 23 (Nov. 15, 2017) [IACtHR Advisory Opinion No. 23/17] at para. 51; notes 71, 81, 82, 119, 120, 198; and Inter-American Court of Human Rights, *Climate Emergency and Human Rights*, Advisory Opinion OC-32/25, Series A. No 32 (May 29, 2025) [IACtHR Advisory Opinion No. 32/25], at paras. 394, 397; notes 140-142, 333, 545, 548, 553, 648, 653, 661, 745, 750, 751, 1068.

¹⁸ See for example Verein Klimaseniorinnen Schweiz v. Switzerland [2024] ECHR 304 (April 9, 2024), at paras. 161-167; Greenpeace Nordic v. Norway, App. No. 34068/21 (ECHR Second Section, Oct. 28, 2025) at paras. 244-249.

¹⁹ See for example *Minister of Environmental Affairs v The Trustees for the Time Being of Groundwork Trust* [2025] ZASCA 43 [Groundwork Trust].

²⁰ David Boyd, *Visit to Botswana – Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, U.N. Doc. A/HRC/55/43/Add.2 (Dec. 29 2023).

²¹ John Knox, *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment on his visit to Madagascar*, U.N. Doc. A/HRC/34/49/Add.1 (April 26, 2017).

1. The interpretation and application of custom and treaty law concerning State obligations on climate change (question (b) in the Advisory Opinion Request) – with a focus on the human right to a clean, healthy and sustainable environment

Climate change poses significant risks to human rights, the environment and the climate system, therefore, as it has been recognised, under human rights law and international law, States have the obligation to protect the environment and prevent significant harms. Obligations of States related to climate change, derive from climate treaties, human rights treaties, environmental treaties, and customary international law. These obligations are consistent across all these sources of law. Such sources should be read harmoniously together as mutually-reinforcing, with an integrative approach. This interpretation is aligned with the International Court of Justice (ICJ) recent *Advisory Opinion concerning Obligations of States in respect of Climate Change* (“**ICJ Advisory Opinion**”), which clarifies that States’ duties to address climate change emerge from a wide range of sources.²² The African Charter thus forms a crucial part of the sources of international and regional law defining States’ obligations in the climate emergency, reinforcing the importance of the current advisory proceedings.

International and regional human rights bodies have also considered these questions. The Inter-American Court of Human Rights clarified States’ human rights obligations in relation to climate change in its recent 2025 Advisory Opinion,²³ and the International Tribunal of the Law of the Sea (ITLOS) likewise analysed States’ climate obligations in the context of the law of the sea in May 2024.²⁴ Moreover, the severe impacts on human rights due to climate change has been widely recognized by the ICJ, the Inter-American Court of Human Rights,²⁵ the UN Office of the High Commissioner on Human Rights,²⁶ and many UN Special Procedures.²⁷ The ICJ has specifically

²² *ICJ Advisory Opinion* at paras. 166-171.

²³ *IACtHR Advisory Opinion No. 32/25*.

²⁴ International Tribunal of the Law of the Sea, *Advisory Opinion No. 31 on Climate Change and International Law* (21 May 2024) [*ITLOS AO No. 31*].

²⁵ *IACtHR Advisory Opinion No. 32/25* at paras. 125-210.

²⁶ Office of the United Nations High Commissioner for Human Rights, *Human Rights and the Relationship between climate change and human rights*, U.N. Doc. A/HRC/10/61 (15 January 2009).

²⁷ See, e.g., Elisa Morgera (special rapporteur on human rights and climate change), *Report of the Special Rapporteur on the promotion and protection of human rights in the context of climate change*, U.N. Doc. A/HRC/56/46 (July 24, 2024) [*Morgera Scene-Setting Report*], Knox *Climate Report*, U.N. Doc. A/HRC/31/52; Boyd *Climate Report*, U.N. Doc. A/74/161; Ian Fry (special rapporteur on human rights and climate change), *Promotion and protection of human rights in the context of climate change*, U.N. Doc. A/77/226 (July 26, 2022) [*2022 Report of the Special Rapporteur on Climate Change*]; Pedro Arrojo Agudo (Special Rapporteur on the human right to safe drinking water and sanitation), *Special thematic report on climate change and the human rights to water and sanitation* (Jan. and Mar. 2022); Clement Nyaletsossi Voule (Special Rapporteur on the right to freedom of peaceful assembly and association), *Exercise of the rights to freedom of peaceful assembly and of association as an essential to advancing climate justice*, Report to the UN General Assembly, U.N. Doc. A/76/222 (July 23, 2021), at para. 90(g); Saad Alfarargi (Special Rapporteur on the right to development), *Climate action at the national level*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/48/56 (July 2, 2021); Philip Alston (Special Rapporteur on extreme poverty and human rights), *Climate change and poverty*, Report to the UN Human Rights Committee, U.N. Doc. A/HRC/41/39 (July 17, 2019); Balakrishnan Rajagopal (Special Rapporteur on adequate housing as a component of the right to an adequate standard

identified that climate change impacts the rights to life (including non-refoulement), adequate standards of living, (including rights to food, water and housing), and rights to privacy, family and home life as particularly at risk, stressing that women, children, and Indigenous Peoples are particularly at risk of having their rights violated.²⁸

This submission draws on these opinions, relevant jurisprudence and existent interpretation, to clarify States' climate-related obligations under human rights law and international law.

a. Obligation of all States to protect the environment and the climate system and to prevent harm

The starting point of States' international climate-related obligations is the obligation to protect the environment and the climate system, and to prevent significant harm. Customary international law has long required that States prevent harm to one another. The ICJ has reiterated that States must "avoid activities which take place in [their] territory, or in any area under [their] jurisdiction, causing significant damage to the environment of another State".²⁹ This essential premise is the core of many of the obligations under international environmental law, and was among the first environmental obligations to be recognised as customary international law.³⁰ Recently the ICJ has concluded that this obligation to protect the environment and the climate system, and prevent harm, is *erga omnes*³¹ therefore it applies to all States as they are part of the international community.

The obligation to prevent harm is also well-recognized in international climate treaties including the UN Framework Convention on Climate change (UNFCCC) and the Paris Agreement, as well as in the Convention on Biological Diversity (article 3), and the UN Convention to Combat Desertification. This obligation is consistent with States' human rights obligations as explained below, including that States must take appropriate measures, implement precautionary measures when needed and undertake strategic and environmental impact assessments prior to applying policies and implementing activities and projects.

of living, and on the right to non-discrimination in this context), *Towards a just transformation: climate crisis and the right to housing*, U.N. Doc. A/HRC/52/28 (Dec. 23, 2022); Siobhan Mullally (Special Rapporteur on trafficking in persons, especially women and children), *Addressing the gender dimensions of trafficking in persons in the context of climate change, displacement and disaster risk reduction*, Report to the UN General Assembly, U.N. Doc. A/77/170 (July 15, 2022) [*Gender Dimensions of Trafficking Report*]; François Crépeau (Special Rapporteur on the human rights of migrants), *Human rights of migrants*, Report to the UN General Assembly, A/67/299 (Aug. 13, 2022); Victoria Tauli-Corpuz, Special Rapporteur on the rights of indigenous peoples), *Report of the Special Rapporteur on the rights of indigenous peoples*, Report to the UN General Assembly, U.N. Doc. A/HRC/36/46 (Nov. 1, 2017).

²⁸ *ICJ Advisory Opinion* at paras. 376-386.

²⁹ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, 2010 I.C.J. Rep. 14 ¶101 (Apr. 20, 2010).

³⁰ Decision of 11 March 1941, United Nations, Reports of International Arbitral Awards, Vol. III, p. 1965; *Corfu Channel (United Kingdom v. Albania)* (Merits, Judgment, I.C.J. Reports 1949, p. 22; *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, I.C.J. Reports 2010 (I), p. 56, para. 101. See also *Climate Change, Advisory Opinion*, ITLOS Reports 2024, p. 91, para. 239, and p. 137, para. 397.

³¹ *ICJ Advisory Opinion* at para. 440.

The duty to prevent harm is particularly important to avoid risks of significant harm to the environment and to the climate system. Greenhouse gas (GHG) emissions pose such significant risk, as recognized by the ICJ and ITLOS, based on the best available science.³² Due to these significant risks, both the ICJ and ITLOS have concluded that States must reduce these emissions and prevent further harm, recognizing also that there are different degrees of contribution to such risks.

The ICJ has clarified that “the specific character of the risk of significant harm to the climate system is indisputably established”, as science demonstrates that the primary source of risks linked with arising anthropogenic climate change are cumulative emissions. Therefore, and based on this “quintessential universal risk” that is general and urgent, States must observe a “general standard of conduct, to be applied subject to the principle of common but differentiated responsibilities and respective capabilities”.³³

In consequence, to prevent harm in the context of climate change, States must meet obligations of mitigation and adaptation. *Mitigation* refers to States’ responsibility to reduce greenhouse gas emissions and to protect carbon sinks and reservoirs (such as forests and the ocean).³⁴ *Adaptation* refers to measures States must take to respond to the actual or expected impacts of climate change.³⁵ These obligations are common in that they are universal and must be implemented aligned with respecting, protecting and fulfilling human rights.

States hold a further obligation where harm is not prevented: to respond for the *loss and damage* caused by GHG emissions. As the ICJ has confirmed, and reflecting on the differentiated contribution of GHG by some States in comparison to others, this includes an obligation by high-emitting States to make reparations for internationally wrongful acts where their actions have harmed other States.³⁶

States’ obligations to protect the environment and the climate system should be progressively realised. The principle of progressive realisation is common both to human rights law (including the jurisprudence of this Court), as well as obligations arising from international climate treaties. Additionally, the principle applies to States’ obligations under customary international law, international human rights law, and climate treaties. For instance, the ICJ has confirmed that States’ mitigation and adaptation efforts over time—enshrined in States’ reported Nationally Determined Contributions (NDCs)—must constitute a “progression” beyond prior efforts, and

³² *ICJ Advisory Opinion at para. 80*, citing the work of the IPCC.

³³ *Id.* at para 127.

³⁴ *Id.* at para. 85: “The IPCC defines mitigation as a ‘human intervention to reduce emissions or enhance the sinks of greenhouse gases’”.

³⁵ *Id.* at para. 86: “The IPCC defines adaptation as ‘the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities’”.

³⁶ *Id.* at para. 450.

(subject to CBDR-RC) reflect a country's "highest possible ambition".³⁷ At minimum, States' NDCs must "be capable of making an adequate contribution" to limiting emissions to no more than 1.5°C above pre-Industrial era temperatures.³⁸ States must also make "best efforts" and "exercise[] due diligence in [their] efforts and in deploying appropriate means" to *implement* NDCs, "including in relation to activities carried out by private actors".³⁹ Similar obligations relate to States' adaptation efforts.⁴⁰

b. Obligation to act with Stringent Due Diligence

Due to the indisputable fact that climate change and its cumulative impacts pose a risk of significant harm to the environment, the climate system and human rights, the ICJ has clarified that States must act with stringent due diligence to prevent those risks.⁴¹ Such stringent due diligence must be based on the best available science and consider the probability, foreseeability, severity and magnitude of the occurrence of the harm. In addition, the standard of acting with stringent due diligence applies to all obligations related to preventing those risks, including regulating, monitoring and controlling, and enforcing regulations, as discussed below.

Under international law, the standard of due diligence to be applied varies accordingly "the obligation in question, the level of scientific knowledge, the risks of harm and the urgency involved".⁴² ITLOS and the Inter-American Court of Human Rights also reached to similar conclusions regarding the stringent due diligence standard in the context of climate change. According to ITLOS, under the law of the sea States have a general obligation to protect and preserve the marine environment, an obligation of stringent due diligence "given the high risks of serious and irreversible harm to the marine environment from climate change impacts and ocean acidification".⁴³ Adding that this obligation is even more stringent in relation to transboundary pollution.⁴⁴ The Inter-American Court concluded that based on existing information in relation to the climate crisis, the "extreme gravity of climate impacts", and the urgency of effective measures to prevent irreparable harm, States must act with "enhanced due diligence" in order to comply with their obligation to guarantee rights protected under the American Convention.⁴⁵ All three courts that States hold obligations of stringent due diligence: a standard needed due to the extreme risks posed by climate change.

³⁷ *Id.* at para. 241.

³⁸ *Id.* at para. 248.

³⁹ *Id.* at para. 252-253.

⁴⁰ *Id.* at para. 258.

⁴¹ *Id.* at paras. 254, 275, 276 and 282.

⁴² *Id.* at para. 254.

⁴³ *ITLOS AO No. 31*, para. 400.

⁴⁴ *Id.* para. 258.

⁴⁵ IACtHR OC32/25, para. 233.

Every increment of global warming increases the risks associated with climate change. Therefore, decisions related to the main drivers of climate change, such as the licensing, extraction, use and consumption of fossil fuels, and activities related to fragile ecosystems, or that might impact people and groups in vulnerable situations, require such stringent due diligence from States. Underscoring that the duty of stringent due diligence applies to all States, despite and in addition to the CBDR-RC.

c. Precautionary Principle

The precautionary principle is an established rule of international environmental law, and is enshrined in multiple treaties,⁴⁶ including the United Nations Convention on the Law of the Sea,⁴⁷ the United Nations Framework Convention on Climate Change,⁴⁸ the Convention on Biological Diversity⁴⁹ and, most recently, the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction.⁵⁰ According to the precautionary principle, States must adopt adequate measures to prevent severe or irreversible harm, even in the absence of definitive scientific evidence about the occurrence or the risk of harm.⁵¹

In the same way, States must also uphold the precautionary principle to prevent human rights violations in the face of potential threats of serious or irreversible environmental damage, the absence of scientific certainty is not an excuse to avoid or postponed measures to prevent such damage.⁵² This obligation has been reaffirmed by UN treaty bodies, including the Human Rights

⁴⁶ See, for example, Convention on the Conservation of Antarctic Marine Living Resources; United Nations Framework Convention on Climate Change; Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish, art. 6; 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, art. 3 (1); Protocol of 1997 to Amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, preamble; and Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.

⁴⁷ International Tribunal for the Law of the Sea, advisory opinion of 1 February 2011, paras. 131–135.

⁴⁸ Article 3.

⁴⁹ Preamble.

⁵⁰ Arts. 19 (3) and 26 (5).

⁵¹ Rio Declaration on Environment and Development, principle 15.

⁵² Astrid Puentes Riaño and Elisa Morgera. (2025). *The precautionary principle and deep-seabed mining: A State obligation under international law that must be urgently respected*. Special Procedures, United Nations Special Rapporteur on the human right to a clean, healthy and sustainable environment, Special Rapporteur on climate change and human rights. Available at:

<https://www.ohchr.org/sites/default/files/documents/issues/environment/srenvironment/activities/policy-brief-dsm-1-sre.pdf>

Committee,⁵³ the Committee on Economic, Social and Cultural Rights,⁵⁴ and the Committee on the Rights of the Child.⁵⁵ Regional human rights tribunals, including the Inter-American Court of Human Rights,⁵⁶ and the European Court of Human Rights⁵⁷ have also upheld this principle.

The three most recent Advisory Opinions related to climate change have addressed this principle too, acknowledging key characteristics. The precautionary principle is an integral part of the general obligation of due diligence under the duty to prevent significant harm to the environment and to human rights.⁵⁸ This means the precautionary principle forms part of customary international law, therefore, if a State that does not exercise due diligence in the performance of its primary obligation to prevent significant harm to the environment, including to the climate system, commits an internationally wrongful act entailing its responsibility.⁵⁹

Therefore, the precautionary principle guides States in the determination of the required standard of conduct in fulfilling their customary duty to prevent harm. If States disregarded or do not adequately account for the risks involved in the activities under their jurisdiction or control, they would not meet their obligation of due diligence.⁶⁰ Furthermore, this obligation extends to both the degradation of the global climate system and to the resulting human rights violations.⁶¹

Finally, the precautionary principle is informed by the best available science.⁶² Given the scientific evidence concerning the serious and irreversible damage caused from GHG emissions and environmental degradation, the precautionary principle is particularly relevant. This includes the scientific fact that increasing concentrations of GHGs in the atmosphere is primarily due to human activities, namely GHG emissions and the destruction of carbon reservoirs and sinks.⁶³

⁵³ Human Rights Committee, General Comment No 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, on the right to life (30 October 2018) UN Doc CCPR/C/GC/36, para 62.

⁵⁴ Committee on Economic, Social and Cultural Rights, General Comment No. 25 (2020) on science and economic, social and cultural rights, E/C.12/GC/25, 30 April 2020, para 56.

⁵⁵ Committee on the Rights of the Child, General Comment No. 26 (2023) on children's rights and the environment, with a special focus on climate change, CRC/C/GC/26, 22 August 2023, para. 69.

⁵⁶ IACtHR Advisory Opinion No. 23/17, and Case of the Inhabitants of La Oroya v Peru, Preliminary Objections, Merits, Reparations and Costs (27 November 2023), para. 416.

⁵⁷ ECtHR, *Tătar v Romania* (27 January 2009) App no 67021/01, para. 109.

⁵⁸ *ICJ Advisory Opinion* at para. 294, *ITLOS AO* at para. 242, and *IACtHR Advisory Opinion 32/25* at para. 229.

⁵⁹ *ICJ Advisory Opinion* at para. 409.

⁶⁰ *ITLOS AO No. 31* at para. 242.

⁶¹ *IACtHR Advisory Opinion 32/25* at para. 229.

⁶² *ITLOS AO No. 31* at para. 213, *ICJ Advisory Opinion* at para. 136, and *IACtHR Advisory Opinion 32/25* at para. 236.

⁶³ *ITLOS AO No. 31* at para. 213 and *ICJ Advisory Opinion* at para. 72.

d. Obligation to Regulate

The due diligence obligation encompasses the duty to regulate private actors, enforce climate rules and laws,⁶⁴ and undertake rigorous environmental impact assessment (discussed below). In the context of climate change, stringent due diligence includes “regulatory mitigation mechanisms that are designed to achieve the deep, rapid, and sustained reductions of GHG emissions that are necessary for the prevention of significant harm to the climate system”.⁶⁵ It also requires taking into account relevant scientific and technological information and relevant international rules and standards, and adopting the precautionary principle. This includes substantive obligations (such as enacting domestic laws and regulations), and procedural measures (such as notifying other countries of their risk of harm).⁶⁶

In line with the stringent duty of due diligence, States’ regulatory frameworks must be capable of preventing harm. The ICJ has clarified that States’ policies must be capable of limiting increases in global temperatures to no more than 1.5°C above pre-industrial temperatures. This is in line with the more ambitious limit set out in the Paris Agreement—an agreement that has been ratified by all but one African State.⁶⁷ Recognizing that even under a global warming of 1.5°C there are already severe and irreversible damages to States and human rights of peoples and communities, at minimum, this Court should endorse the 1.5°C as the maximum limit of global warming, as one consistent with international law and with human rights obligations, and based on best available science.

There is growing evidence that even at 1.5°C of global warming, many African States will face increasingly devastating impacts which will threaten the rights and livelihoods of millions of individuals and Peoples. As Africa has already experienced dire impacts that are affecting human rights, its foreseeable that at any increase of warming will cause even worse impacts. Thus, this Court should emphasize that a true human rights-consistent approach should strive to avoid even this level of global warming, and to make best efforts to avoid *any* increase in global temperatures, consistent with the principle of “highest possible ambition” as set out in the Paris Agreement, and confirmed in the ICJ’s Advisory Opinion.⁶⁸

The obligation to act with stringent due diligence and to regulate, includes both climate action efforts (such as renewable energy including solar, wind), and other efforts (such as the impact of those measures on affected communities). In that sense, such regulations and efforts must comply with international obligations while respecting human rights. In addition, it must be highlighted

⁶⁴ *ICJ Advisory Opinion* at para. 284, *Ocean Report*, U.N. Doc. A/HRC/58/59, para. 75-77, *Clean Air Report*, U.N. Doc. A/HRC/61/47, para. 42.

⁶⁵ *ICJ Advisory Opinion* at para. 282.

⁶⁶ *Id.* at para. 279.

⁶⁷ All States except Libya.

⁶⁸ *ICJ Advisory Opinion* at paras. 242 and 271.

that States must avoid maladaptation measures that increase the impacts from the climate emergency, while undermining human rights.

e. Common But Differentiated Responsibilities and Respective Capabilities

Under international law and human rights law, including the Paris Agreement, *all* States have the obligation to reduce greenhouse gas emissions, remediate damages and restore ecosystems, to adapt to the effects of climate change and address loss and damage. In line with the differentiated historic and current contribution to climate change, these obligations are subject to the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC). This principle underscores that States must implement all effective measures needed and therefore, none is excluded from such obligations. Specially in relation to human rights, as it will be explained below, States have the obligation to implement all actions under their power to prevent, respect and fulfil human all rights including regarding climate impacts. As the ICJ concluded, States must “take all the means at its disposal to protect the climate system”.⁶⁹

The principle of CBDR-RC recognises, as concluded by the ICJ, a spectrum of historic and current contributions to climate change, considering that some more developed States have also contributed more to climate change, and having more resources to address it, these States must contribute more to solve it. Meanwhile others have contributed significantly less.⁷⁰ This “spectrum” approach reinforces that CBDR-RC does not categorically excuse any country from taking action to address the climate crisis and prevent and remediate human rights impacts derived from it.

African States, therefore, like all States, carry obligations under human rights law, customary and treaty law to address the climate crisis. Such obligations will differ between African States—and between African and non-African States—depending on each State’s share of historic and ongoing responsibility, and on their respective capabilities. While many African States are historically very low and are ongoing low contributors to GHG, other African States are currently high emitters, and/or are projected to significantly increase their global emissions, due to increased consumption or extraction of fossil fuels, among other activities. For example, South Africa, that according with the IPCC emits approximately half of the carbon emissions in the region,⁷¹ with a per capita

⁶⁹ *Id.* at para. 191.

⁷⁰ *Id.* at para. 150.

⁷¹ Trisos, C.H., I.O. Adelekan, E. Totin, A. Ayanlade, J. Efitre, A. Gameda, K. Kalaba, C. Lennard, C. Masao, Y. Mgaya, G. Ngaruiya, D. Olago, N.P. Simpson, and S. Zakieldean, 2022: Africa. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 1285–1455, doi:10.1017/9781009325844.011, pg. 1380.

emission also significantly high.⁷² In addition to the increased dependence on fossil fuels, many of those projects are impacting human rights, and threaten to aggravate the current triple planetary crises, while not complying with international law standards.⁷³ Likewise, African States differ in their *capabilities* to address the climate crisis. Determining the precise contribution of any particular State is beyond the scope of this submission. It is nevertheless clear that all States have the obligation to address climate change, including through mitigation and adaptation measures, advancing effective international cooperation, contributing to remediation, and the protection of human rights that might be impacted by climate harms in relation to their contribution to the crisis.

f. Obligations Related to Transboundary Harm

The core of the principle to prevent harm concerns avoiding *transboundary* harms. States hold an obligation under customary international law not to cause harm to other States. Likewise, under international human rights law, States have the obligation to protect the rights of persons outside a State's territory where they are affected by activities taking place within a State's territory, or subject to a State's jurisdiction.⁷⁴ In these circumstances, States are bound by a wide range of human rights, including those protected by the International Covenant on Civil and Political Rights.⁷⁵ The Inter-American Court of Human Rights concluded that States may be responsible for "any significant damage caused to persons outside their borders" linked with activities that originated in their territory, "or under their effective control or authority", providing that "there must always be a causal link between the damage caused and the act or omission of the State of origin in relation to the activities in its territory or under its jurisdiction or control".⁷⁶

In relation to climate change, impacts specially from GHG can and are having transboundary impacts. Hence, as the Committee on the Rights of the Child concluded, adopting the Inter-American Court standard, States are responsible where greenhouse gases which are released in their own territory generate impacts which infringe on the human rights of persons in other States.⁷⁷

⁷² EDGAR (Emissions Database for Global Atmospheric Research) Community GHG Database, Joint Research Centre (JRC) - European Commission, uri: edgar.jrc.ec.europa.eu/dataset_ghg2024, publisher: JRC European Commission, date published: 2024; International Energy Agency (IEA), uri: edgar.jrc.ec.europa.eu/dataset_ghg2024, publisher: JRC European Commission, date published: 2024

⁷³ See for example the East African Crude Oil Pipeline, a project supported by several African States which raises significant international law and human rights challenges. See *Letter from UN Experts Concerning East African Crude Oil Pipeline (EACOP)*, Ref AL TZA 3/2025 (July 3, 2025), available at <https://spcommreports.ohchr.org/TMResultsBase/DownloadPublicCommunicationFile?gId=30125>

⁷⁴ ICJ *Advisory Opinion* at para. 396.

⁷⁵ See *e Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (ICJ Reports 2004 (I), p. 179, para. 108), cited in *ICJ Advisory Opinion* at para. 396, discussing Article 2(1) of the ICCPR.

⁷⁶ *IACtHR Advisory Opinion No. 23/17* at para. 103.

⁷⁷ *Chiara Sacchi et. al. v. Argentina, Brazil, France, and Germany* (Communication Nos. 104-107/2019), CRC/C/88/D/104/2019, CRC/C/88/D/105/2019, CRC/C/88/D/106/2019, CRC/C/88/D/107/2019, 11 November 2021, paras. 10.5-10.7

In such circumstances, States must provide “prompt, adequate and effective redress” to persons whose rights have been violated.⁷⁸

Furthermore, States’ activities must not prevent other States from complying with their own human rights obligations.⁷⁹ Where GHG emissions from an origin State create climate-related impacts which render it impossible for affected States to protect the rights of persons in their territories, the origin State may be internationally responsible for such harm.

g. Obligation of International Cooperation

At the bedrock of States’ climate duties lies the obligation of international cooperation. A duty derived from treaties and also an obligation under customary international law.⁸⁰ Global challenges such as the climate crisis can only be addressed through cooperation between States at the bilateral, regional and global levels. Cooperation is crucial to the realisation of all human rights including in relation to the human right to a healthy environment and regarding transboundary impacts. It is a central duty contained in the UN Charter,⁸¹ the International Covenant on Economic, Social and Cultural Rights (ICESCR),⁸² and the Constitutive Charter of the Organization of African Unity.⁸³ Likewise, the Rio Declaration emphasizes the duty to “cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth’s ecosystem”.⁸⁴

The UN Committee on Economic, Social and Cultural Rights, for instance, has emphasized that “co-operation for development and thus for the realization of economic, social and cultural rights is an obligation of all States”, and includes an obligation on developed countries to provide international economic and technical assistance to developing States.⁸⁵ The UN Committee on the Rights of the Child has also identified good faith cooperation as essential to the realisation of children’s rights in the context of climate change.⁸⁶

The duty is also incorporated into climate treaties. The UNFCCC requires States to cooperate, when developing and transferring technologies to reduce greenhouse gas emissions, preserve

⁷⁸ *IACtHR Advisory Opinion No. 23/17* at para. 103.

⁷⁹ *Id.* at para. 101.

⁸⁰ *ICJ Advisory Opinion* at para. 140.

⁸¹ UN Charter Article 1(3); Articles 55-56.

⁸² ICESCR (1966) 993 UNTS 3 at article 2(1), 11, 15, 22, and 23. See also CESCR, *General Comment No 3* (1990) UN Doc E/1991/23 [*CESCR General Comment 3*] at para. 13.

⁸³ Charter of the OAU (1963) 479 UNTS 39 at article 2(2).

⁸⁴ Rio Declaration on Environment and Development (14 June 1992) UN Doc A/CONF.151/26 (vol I) [*Rio Declaration*], Principle 7.

⁸⁵ *CESCR General Comment 3*, para. 14 and 45.

⁸⁶ Committee on the Rights of the Child, *General Comment No 26 (2023) on children’s rights and the environment, with a special focus on climate change* UN Doc CRC/C/GC/26 (Aug. 22, 2023) [*Committee on the Rights of the Child General Comment 26*] at paras. 93, 94, 112.

carbon sinks, and adapt to the impacts of climate change, exchange technical information, and facilitating climate-related education and public awareness.⁸⁷ These duties are primarily owed by developed countries toward developing countries.⁸⁸ The Paris Agreement takes these duties further, setting out specific, legally-binding and non-discretionary obligations related to climate finance,⁸⁹ technology development and transfer,⁹⁰ and capacity-building.⁹¹ Importantly, the duty must be performed in good faith.⁹²

As with the duty of due diligence, the duty to cooperate is a “stringent” one.⁹³ The ICJ has clarified that international cooperation includes obligations of climate financing, technology development and transfer, and capacity-building. Such activities must reflect “the capacity of developed States and the needs of developing States”.⁹⁴ The duty of cooperation has also been recognized as a legal obligation by the International Tribunal for the Law of the Sea.⁹⁵ The ICJ has reiterated that in relation to the environment, cooperation is a “paramount principle in solving global problems and ‘it is by co-operating that the States concerned can jointly manage the risks of damage to the environment’”.⁹⁶

Neither the rights nor the duties of African States can be realised without effective cooperation, both globally and regionally. It is vital that African States work together towards effective mitigation, adaptation and just transition measures, in line with their international and human rights obligations. African States have implemented some global efforts to demand and work toward greater cooperation on climate mitigation, adaptation, and compensation for loss and damage. Such efforts are important and should be strengthened, consistent with a human rights- and ecosystem-based approaches. This is something that should be recognised by this Court as core human rights obligations. Especially as at a global level, cooperation efforts are falling far short of the necessary standard.

⁸⁷ UNFCCC Article 3 and 4(1).

⁸⁸ UNFCCC Article 4(3)-4(5).

⁸⁹ Paris Agreement (adopted Dec. 12, 2015, entered into force Nov. 4 2016) UN Doc FCCC/CP/2015/10/Add.1, 21 Article 9 [*Paris Agreement*].

⁹⁰ Paris Agreement Article 10.

⁹¹ *Id.* Article 11.

⁹² *ICJ Advisory Opinion* para. 141.

⁹³ *Id.* para. 268.

⁹⁴ *Id.* para. 265.

⁹⁵ *ITLOS AO No. 31* at paras. 294-299.

⁹⁶ *ICJ Advisory Opinion* at para. 261 citing *Pulp Mills* at para. 77.

2. Specific State human rights obligations towards past, present and future generations affected by climate change (question (c) in the Advisory Opinion Request)

This brief has already canvassed essential obligations under international law and human rights law, linked with the human right to a healthy environment. Furthermore, the climate change impacts the full spectrum of human rights as mentioned in section 1. A thorough analysis of the impacts of climate change in relation to every human rights is beyond the scope of this *amicus curiae*. This approach should not be interpreted to say that these are the only or most important rights affected by the climate crisis. Human rights are indivisible, interdependent, and interrelated.

This Court has the opportunity to clarify the range of human rights impacts arising from climate change, and to help States understand both the complexity of the situation and the pending effective actions. Human rights impacted by the climate crises includes rights protected under the African Charter, as well as the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights—treaties which have been ratified by almost all parties to the African Charter.⁹⁷ This Court has clarified that it has the jurisdiction to consider States' compliance with international human rights law beyond the African Charter in the context of environmental harm.⁹⁸

I begin by examining the content of the human right to a clean, healthy and sustainable environment in the context of climate change. I then discuss the right to life, right to non-discrimination, and the rights of future generations. The rights and interests of people and groups in vulnerable situations are discussed in the following section.

a. Status and recognition of the human right to a clean, healthy and sustainable environment

In this Advisory Opinion, this Court has the opportunity to offer a definitive interpretation of Article 24 of the African Charter in relation to climate change. To this end, the understanding of the status and content of the human right to a clean, healthy and sustainable environment (“**right to a healthy environment**”) is vital, and is explained below.

First, it is important to clarify that the different language in which this right is expressly recognised by the African Charter and internationally by the UN, reflects the diversity of legal systems and the historic evolution through which the same human right is expressed. Article 24 of the African Charter provides that “[a]ll peoples shall have the right to a general satisfactory environment favourable to their development”. Resolutions from the UN Human Rights Council and the General Assembly, refer to “the right to a clean, healthy and sustainable environment”. Noting also that all African States voted in favour of these resolutions, and only one abstained at the

⁹⁷ Botswana and Mozambique have not ratified the ICESCR.

⁹⁸ *LIDHO v Côte d'Ivoire* (App No 041/2016, Sept. 5 2023) at para. 50.

General Assembly. The diversity in the language is also reflected in other regions, as shown by the slightly different wording in recognising the right to a healthy environment in the Inter-American System, ASEAN and the Arab Charter. While all these instruments refer to the same right, there are variations in the wording used. Different wording can also be seen in the constitutional recognition of this right globally, a situation that is reflected in the recognition of other human rights as well. This underscores the importance of the current Advisory Opinion in providing the clarity that the region needs. A similar clarification that the Inter-American Court on Human Rights provided with the advisory opinion on climate change and human rights the Inter-American region. Standards and clarifications that may be helpful for this Court to follow, as applicable to the African region.

The human right to a healthy environment is now firmly established in customary international law, with extensive evidence of both State practice and *opinio juris*.⁹⁹ There is near-universal recognition of the right in international and domestic law. Respecting, protecting, and fulfilling the right to a clean, healthy and sustainable environment is, therefore, a binding obligation to all States.

As the Court is aware, Article 24 of the African Charter was the first in any regional human rights treaty to expressly recognise a healthy environment. Even more, it recognises that the environment and development are not opposed to one another: instead, effective development must be sustainable, which means considering existent boundaries from our planet, in order to safeguard the rights and welfare of all peoples, to guarantee thriving societies. This balance is reflected in the constitutional provisions of many African States.¹⁰⁰

This Court and the African Commission on Human and Peoples' Rights ("**African Commission**") have developed important jurisprudence on Article 24. In *Social and Economic Rights Action Center v Nigeria (SERAC)*, the African Commission provided one of the earliest commentaries on Article 24, and in doing so, one of the world's first interpretations of the right to a healthy environment.¹⁰¹ In a communication concerning the Nigerian government's involvement in environmentally harmful (and violent) oil extraction operations, the Commission emphasised that Article 24 includes duties to respect, protect, and promote human rights. At its core, Article 24 "requires the state to take reasonable and other measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources".¹⁰² This includes negative, "non-interventionist" obligations (such as not "carrying out, sponsoring or tolerating" practices which violate the right), as well as positive obligations (such as "ordering or at least permitting independent scientific monitoring", and

⁹⁹ Astrid Puentes Riaño, "Healthy Environment: A Human Right and Customary International Law, 29 January 2025, IISD, and ICJ Advisory Opinion, Separate Opinion of Judge Aurescu; ICJ Advisory Opinion, Separate Opinion of Judge Tladi.

¹⁰⁰ See for example Article 24 of the Constitution of South Africa.

¹⁰¹ *SERAC v Nigeria* (Comm No 155/96 2002).

¹⁰² *SERAC v Nigeria* at para. 52.

“requiring and publicising environmental and social impact studies”).¹⁰³ It also requires States to protect their citizens “from damaging acts that may be perpetrated by private parties”.¹⁰⁴

More recently, in *Ligue Ivoirienne des Droits de L’homme v Republic of Cote D’Ivoire (LIDHO)*, this Court provided an authoritative interpretation of Article 24 finding that the State had violated it. Drawing on *SERAC*, General Comment 14 of the UN Committee on Economic, Social, and Cultural Rights, and Article 2 of the Algiers Convention, this Court observed that States owe obligations both to avoid causing environmental harm, and to restore the environment after harm has taken place.¹⁰⁵

The right to a clean, healthy and sustainable environment has also been extensively recognised and developed in the domestic jurisprudence of many African countries. **All 54 African United Nations Member States recognise the right in their national constitution or legislation, or through an international treaty.** Thirty-seven African States expressly protect the right to a healthy environment in their national constitution.¹⁰⁶ In another five countries, courts and legal scholars have identified an implied right to a healthy environment emerging from other rights or constitutional principles.¹⁰⁷ The remaining 12 States recognize the right in national legislation,¹⁰⁸ or through ratification of the African Charter¹⁰⁹ or the Arab Charter.¹¹⁰

¹⁰³ *Id.* at para. 53.

¹⁰⁴ *Id.* at para. 57.

¹⁰⁵ *LIDHO v Cote D’Ivoire* at para. 183.

¹⁰⁶ Algeria (Article 68), Angola (Article 39(1)), Benin (Article 27), Burkina Faso (Articles 29-30), Burundi (Article 19), Cabo Verde (Article 72), Cameroon (Preamble), Central African Republic (Article 11(1)), Chad (Article 51), Comoros (Preamble), Congo (Article 41), Cote d’Ivoire (Article 27), Democratic Republic of the Congo (Article 53), Egypt (Article 46), Ethiopia (Articles 44(1) and 92), Gabon (Article 1(8)), the Gambia (Article 61), Guinea (Article 16), Kenya (Article 42), Malawi (Article 13(d)), Mali (Article 15), Mauritania (Article 19), Morocco (Article 31), Mozambique (Article 90), Niger (Article 3), Rwanda (Article 22), Sao Tome and Principe (Article 49), Senegal (Article 8), Seychelles (Article 8), Somalia (Article 25), South Africa (Article 24), South Sudan (Article 41), Sudan (Article 11), Togo (Article 41), Tunisia (Article 45), Uganda (Article 39), and Zimbabwe (Article 73(1)).

¹⁰⁷ Ghana (*see e.g. Centre for Public Interest Law v Environmental Protection Agency* (EN)1/2005, High Court at Accra, 27 March 2009; *Stephens v Land Commission* BL/78/2007, High Court at Accra), Liberia (although the right is not explicit in the Liberian Constitution, the Environmental Protection Act 2003 ss 1 and 32 clarify that the right has constitutional status), Namibia (Article 144 of the Constitution incorporates international law, including Article 24 of the African Charter, into domestic constitutional law), Nigeria (*see Gberme v Shell Petroleum Development Company*, Judgment of 14 November 2005, Suit No. FHC/B/CS/53/05 (Federal High Court of Nigeria, Benin Division)), and the United Republic of Tanzania (*see Balegele v Dar es Salaam City Council*, High Court of Tanzania at Dar es Salaam, Miscellaneous Civil Case No. 316 of 2000).

¹⁰⁸ *See e.g.* Law 51/AN/09/6th L (27 January 2009) (Djibouti) Title I & Article 7, Chapter II; Proclamation 179/2017 (Environmental Protection & Management Framework) Article 5(6) (Eritrea); Law No. 1/2011, March 2, 2011, art. 4(1) (Guinea-Bissau); Environment Act 2008 s 4 (Lesotho); Loi No. 2015-003 du 20 janvier 2015 portant Charte de l’Environnement Malagasy actualisee arts. 6-7 (Madagascar); Environmental Management Act No. 12 of 2011 s 4(1) (Zambia).

¹⁰⁹ Botswana; Djibouti; Equatorial Guinea; Eritrea; Eswatini; Guinea-Bissau; Lesotho; Libya; Madagascar; Mauritius; Sierra Leone; Zambia.

¹¹⁰ Djibouti; Libya.

The human right to a clean, healthy and sustainable environment is also expressly recognised in international law. The international community has recognised the connection between human rights and the environment for over 50 years starting with the Stockholm Declaration of 1972, declaring that the environment is “essential to [humankind’s] well-being and to the enjoyment of basic human rights—even the right to life itself”.¹¹¹ More recently, the right to a healthy environment has been expressly recognised by unopposed resolutions of both the UN Human Rights Council and General Assembly.¹¹² At the General Assembly only one African State abstained, and all others voted in favour of the resolution, while all African States at the Human Rights Council voted in favour.

The right is also recognised regionally, in the San Salvador Protocol¹¹³ and the Inter-American Court of Human Rights,¹¹⁴ the 2012 ASEAN Human Rights Declaration¹¹⁵ and the 2025 ASEAN Declaration on the Right to a Safe, Clean, Healthy and Sustainable Environment, and the Arab Charter on Human Rights.¹¹⁶ Over 300 decisions from the European Court of Human Rights have refer to the interdependence of the environment and human rights, and the importance of a healthy environment—including a stable climate—as underpinning a wide range of other rights.¹¹⁷ The right is recognised in the constitutions, judicial decisions, or treaty obligations of at least 164 UN Member States.¹¹⁸

The International Court of Justice recognized that “the effective enjoyment of a number of human rights cannot be fully realized if those who hold them are unable to live in a clean, healthy and sustainable environment”.¹¹⁹ The Court concluded that “protection of the environment is a precondition for the enjoyment of human rights”, as well as essential and interdependent with other human rights.¹²⁰ As the Court expressly concluded:

... a clean, healthy and sustainable environment is a precondition for the enjoyment of many human rights, such as the right to life, the right to health and the right to an

¹¹¹ *Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration)* (Stockholm, June 16, 1972) U.N. Doc. A/CONF/48/14/Rev.1 Principle 1.

¹¹² Human Rights Council, Resolution 48/13: *The human right to a clean, healthy and sustainable environment*, U.N. Doc. A/HRC/RES/48/13 (Oct. 18, 2021); General Assembly, *The human right to a clean, healthy and sustainable environment*, U.N. Doc. A/76/300 (July 28, 2022).

¹¹³ Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (adopted 17 November 1988, entered into force 16 November 1999) OAS Treaty Series No 69 (1988) (‘San Salvador Protocol’).

¹¹⁴ *IACtHR Advisory Opinion No. 23/17; IACtHR Advisory Opinion No. 32/25; Inhabitants of La Oroya v Peru* (Series C No 511, Nov. 27, 2023).

¹¹⁵ ASEAN Human Rights Declaration (adopted Nov. 18, 2012, Phnom Penh) article 28(f).

¹¹⁶ Arab Charter on Human Rights (adopted May 22, 2004, entered into force Mar. 15, 2008) article 38.

¹¹⁷ See e.g. *KlimaSeniorinnen; Greenpeace Nordic v Norway* App no 34068/21 (ECtHR, Oct. 28, 2025); *Lopez Ostra v Spain* Series A no 303-C, App no 16798/90 (ECtHR, Dec. 9, 1994).

¹¹⁸ *Ocean Report*, U.N. Doc. A/HRC/58/59, para. 10.

¹¹⁹ *ICJ Advisory Opinion at para. 389.*

¹²⁰ *Id.* para. 393.

adequate standard of living, including access to water, food and housing. The right to a clean, healthy and sustainable environment results from the interdependence between human rights and the protection of the environment. Consequently, in so far as States parties to human rights treaties are required to guarantee the effective enjoyment of such rights, it is difficult to see how these obligations can be fulfilled without at the same time ensuring the protection of the right to a clean, healthy and sustainable environment as a human right. The human right to a clean, healthy and sustainable environment is therefore inherent in the enjoyment of other human rights. The Court thus concludes that, under international law, the human right to a clean, healthy and sustainable environment is essential for the enjoyment of other human rights.

The right to a healthy environment has also been expressly recognized as an autonomous human right, and extensively analysed by the Inter-American Court of Human Rights. In its recent *Advisory Opinion on the Climate Emergency and Human Rights*, the Court reiterated that this right is “a fundamental right for the existence of humanity, with both individual and collective connotations”.¹²¹ The Court observed that “[i]n its collective dimension, this right constitutes a universal rule that is owed to both present and future generations. That said, the right to a healthy environment also has an individual dimension insofar as its violation may have direct or indirect repercussions on the individual owing to its connectivity with other rights, such as the rights to health, personal integrity and life, among others”.¹²² This finding reinforces earlier decisions of the Inter-American Court which have also recognised the right.

The Inter-American Court’s recognition that the human right to a healthy environment is both a collective and individual right aligns with the text of Article 24 of the African Charter and its interpretation by this Court. Furthermore, as discussed above, it can entail extraterritorial protection in some circumstances.¹²³ This Court is particularly well-placed to clarify the collective aspect of this right for the benefit of the region and contributing globally to the understanding of this aspect, as the African System is the only one which expressly recognised the collective nature of human rights in the text of the treaty. The collective aspect has been recognised in several national jurisdictions and at the Inter-American System. This Court can further contribute by clarifying that a healthy environment encompasses both the individual and also the collective protection. Aspects such as air pollution, sea level rise, biodiversity loss and ecosystem degradation, water pollution, and a safe climate, among others, are impacting individuals and the collective as well, and this is what humanity is witnessing today, with the triple planetary crises. Over and over again, scientific evidence has confirmed that the comprehensive understanding of

¹²¹ *IACtHR Advisory Opinion No. 32/25*.

¹²² *Id.* at para. 272.

¹²³ *Ocean Report*, U.N. Doc. A/HRC/58/59, para. 71. See also *Chiara Sacchi et. al. v. Argentina, Brazil, France, and Germany* (Communication Nos. 104-107/2019), CRC/C/88/D/104/2019, CRC/C/88/D/105/2019, CRC/C/88/D/106/2019, CRC/C/88/D/107/2019, 11 November 2021, paras. 10.5-10.7; *IACtHR Advisory Opinion No. 23/17* at paras. 101, 103, 104.

the dimension of these impacts transcends the individual or a group of people, to evidence that the real impact is on the collective. At the same time, it is evident that the solutions, including alternatives to avoiding risks and advancing remediation, also need to consider the collective perspective, with actions that are centred in the public interest. The African region has understood this collective view since the African Charter, and reflecting the collective right and protection of peoples, in relation to a healthy environment is vital. In doing so, this Court can also highlight the importance of ancestral and traditional knowledge is, that for centuries has recognised these collective aspects. As this right protects present and future generations,¹²⁴ is another aspect that strengthens the importance of its collective aspect and that the Court could also clarify.

b. Content of the right to a clean, healthy and sustainable environment and its obligations

The human right to a healthy environment has several elements in order to explain the content of its right as well as the obligation of States and how to fully protect it. These elements are interrelated and interdependent, therefore, none is more important than another one and impacts on one element can affect others. Such elements are:

- Substantive elements: a safe climate, clean air, safe and sufficient water, healthy and sustainable food, non-toxic environments for living, working, studying, and playing, and healthy biodiversity and ecosystems.¹²⁵
- Procedural elements: access information, public participation in environmental decision-making, and access justice and receive a remedy.¹²⁶

Each of these elements are threatened by States' failures to mitigate and adapt to climate change.

Substantive elements

A **safe climate** is a substantive element of the right to a clean, healthy and sustainable environment. A safe climate is a state in which the global climate system neither harms humans or the planet, nor exacerbates the significant or irreversible damage that climate change has already caused. It also implies stopping the further deterioration of the global climate system. According to the best available science, limiting global warming to no more than 1.5°C above pre-industrial levels is the best way to reduce climate change-related harm.¹²⁷ Thus, States' failure to fulfil their climate-related duties under international law constitutes a violation of the right to a healthy environment.

Noting that the Inter-American Court of Human Rights recognised the “right to a healthy climate” as an independent right.¹²⁸ That Court found that the right has both individual and collective

¹²⁴ *Implementation Report*, U.N. Doc. A/79/270 at para. 78.

¹²⁵ *Implementation Report*, U.N. Doc. A/79/270, paras. 50-70.

¹²⁶ *Id.* at paras. 39-49.

¹²⁷ *Knox Climate Report* U.N. Doc. [A/HRC/31/52](#) (Feb. 1, 2016).

¹²⁸ *IACtHR Advisory Opinion No. 32/25* at para. 298.

elements: it guarantees the right “of each individual to develop in a climate system free from dangerous anthropogenic interference”,¹²⁹ and also the interests of communities and future generations.¹³⁰

Climate change aggravates air pollution, thereby impacting **clean air**, another substantive element of the right to a healthy environment. Air pollution can affect all organs and systems in the body, including in utero, leading to serious disease and death.¹³¹ Climate-related events such as extreme heat and wildfires, can increase ozone levels and particulate matter in the air. Furthermore, the causes of climate change and air pollution are closely interlinked, with air pollutants released by the burning of fossil fuels, such as methane, black carbon (soot), and volatile organic compounds, causing both climate change and air pollution.¹³²

Every stage of the fossil-fuel exploration and extraction cycle contributes to air pollution and its harms. Site preparation for coal, oil and gas projects generate dust and diesel exhaust. Communities near extraction sites face additional health impacts, displacement and evictions with violence and legal intimidation; Indigenous Peoples, people of African descent and peasants are particularly affected.¹³³

The air pollution impacts of fossil fuel extraction and combustion cannot be overstated. Fossil fuels are one of the world’s major sources of air pollution-related health impacts.¹³⁴ These can involve serious chronic diseases, lethal respiratory illnesses, and particular impacts on children, older persons, pregnant people and people living in poverty. Worldwide, air pollution linked to fossil fuels causes over half of the 8.3 million annual deaths from air pollution.¹³⁵

Consequences of unrestricted fossil fuel extraction and combustion disproportionately affect communities living in poverty or racialised, transforming them into “sacrifice zones”: areas with high concentrations of fossil fuel facilities, industrial facilities, transport corridors, extractive industries, and other pollution-intensive activities, tending to be routinely established close to marginalized communities. Climate change and environmental degradation thus exacerbate existing inequalities. People spending their lives in these highly polluted communities experience cumulative health risks, illness and premature mortality.¹³⁶

The right to a healthy environment in relation to a safe climate therefore demands that, at minimum, States develop plans to transition to cleaner energy, stricter emissions controls,

¹²⁹ *Id.* at para. 303.

¹³⁰ *Id.* at para. 304.

¹³¹ *Clean Air Report*, U.N. Doc. A/HRC/61/47 at paras. 3 and 6.

¹³² *Id.* at para. 27 and 29.

¹³³ *Id.* at para. 28, citing Elisa Morgera (special rapporteur on human rights and climate change), *The imperative of defossilizing our economies*, Report to the Human Rights Council, U.N. Doc. A/HRC/59/42 (May 15, 2025).

¹³⁴ See *Air pollution and health*, The Lancet Countdown, <https://lancetcountdown.org/air-pollution-and-health/>.

¹³⁵ *Clean Air Report*, U.N. Doc. A/HRC/61/47, para. 35.

¹³⁶ *Id.* at paras. 18 and 19.

improved planning and better public transport. Because of the link between fossil fuels and pollution, this result is also demanded by the rights to life and health.¹³⁷

Courts across Africa have also recognised this imperative. In 2025, the Supreme Court of Appeal of South Africa, for instance, recognised that poor air quality caused by fossil fuels violated South Africa's protected right to a healthy environment.¹³⁸ Also in 2025, Kenya's Environment and Land Court found that States have an obligation to carefully consider their citizens' well-founded concerns about fossil fuel-related air pollution, and that failure to provide opportunities for participation amounts to the violation of the right to a healthy environment.¹³⁹

To guarantee the right to a healthy environment in relation to clean air, States must implement priority actions including:¹⁴⁰

- a. States must prevent harms and act with stringent due diligence to guarantee clean air. In air pollution cases, other regional human rights courts have analysed real and imminent risks associated with fossil fuel combustion, understanding the genuine and sufficiently ascertainable threat. In *La Oroya v. Peru*, for example, the Inter-American Court of Human Rights recognized that a State can be internationally responsible for the creation of risks to human health resulting from toxic pollution and fossil fuels.¹⁴¹ The Court found that victims do not have to prove a direct link between alleged health impacts and the exposure to contaminants when (a) significant risks to human health posed by pollutants have been proven; (b) it has been demonstrated that persons have been exposed to such pollutants under conditions that endangered their health; and (c) the State has breached its obligation to prevent environmental pollution.¹⁴² Similarly, the European Court of Human Rights in *Cannavacciuolo v. Italy* concluded that when there is exposure to a sufficiently serious, genuine and ascertainable risk to life, States have the duty to act.¹⁴³ The Court stated that it “does not consider it necessary or appropriate to require that the applicants demonstrate a proven link between the exposure to an identifiable type of pollution or even harmful substance and the onset of a specific life-threatening illness or death as a result of it”.¹⁴⁴

¹³⁷ *Id.* at para. 2 and 4.

¹³⁸ *Minister of Environmental Affairs v Trustees of Groundwork Trust* [2025] ZASCA 43 (11 April 2025).

¹³⁹ *Lamu Power Co. Ltd. V Save Lamu* [2025] KEELC 7285 (16 October 2025).

¹⁴⁰ *Clean Air Report*, U.N. Doc. A/HRC/61/47, at paras. 37-51.

¹⁴¹ *La Oroya v. Peru* at paras. 119 and 121; *IACtHR Advisory Opinion No. 32/25* at para. 348.

¹⁴² *La Oroya v Peru* at para. 204.

¹⁴³ European Court of Human Rights, *Cannavacciuolo and others v. Italy*, Application No. 51567/14 and others, Judgment, 30 January 2025, para. 384.

¹⁴⁴ *Id.* at para. 390.

This presumption should be recognized even in contexts other than serious air pollution and toxic pollution, whenever victims are suffering from environmental and climate impacts, that are scientifically proven that a risk of harm exists. Therefore, it will be also important for this Court to recognise it.

- b. States must regulate, control, monitor, and enforce policies to transition away from fossil fuels as explained in greater detail below. The European Court of Human Rights has found that prolonged failure to control air pollution constitutes a violation of the right to private and family life.¹⁴⁵ And in *Groundwork Trust v Minister of Environmental Affairs*, the High Court of South Africa found that delays in regulatory action violated the constitutional right to an environment not harmful to health.¹⁴⁶
- c. States must also undertake environmental, social and human rights impact assessment processes, including with regard to human rights. This obligation is discussed in greater detail below.
- d. States must prevent risks from air pollution arising from the activities of private companies, discussed in greater detail below.

Healthy biodiversity and ecosystems are another fundamental element of the right to a healthy environment. Humanity depends on healthy biodiversity and ecosystems. The balance on Earth, and all life on this planet, also depends on healthy biodiversity and ecosystems thus it must be protected also when there is no apparent link or impact to an individual, its protection comes from its own intrinsic importance. As has been extensively documented, climate change exacerbates impacts on biodiversity and ecosystem destruction in many ways, including through temperature increase, extreme weather events and the degradation of the environment linked with extractive activities. Climate change is also driving marine biodiversity loss, through ocean warming, acidification, sea level rise, and intensifying marine heat waves.¹⁴⁷ Furthermore, biodiversity loss and ecosystem destruction—and in particular, destruction of carbon sinks driven by deforestation—can accelerate climate change.

States must address climate change as a driver of biodiversity and ecosystem collapse. This means that when addressing climate change (and other human rights challenges), States should apply appropriate scientific methodologies focused on levels of biological organisation, and recognise that humans are an integral part of many ecosystems.¹⁴⁸ In addition, biodiversity protection efforts

¹⁴⁵ *Cordella v. Italy* Application Nos. 54414/13 and 54264/15, Judgment, 24 January 2019.

¹⁴⁶ *Minister of Environmental Affairs v Trustees of Groundwork Trust* [2025] ZASCA 43 (11 April 2025).

¹⁴⁷ *Ocean Report*, U.N. Doc. A/HRC/58/59, para. 55.

¹⁴⁸ *ESHRIA Report*, U.N. Doc. A/80/187, at para. 55.

must at all times respect human rights, including customary rights, and the rights of Indigenous Peoples, the rights of small scale farmers and fisherfolk, and the rights of women and girls.¹⁴⁹

Healthy and sustainable produced food as part of the right to a healthy environment, requires that the production of food avoids environmental and human health harms, and protects food systems. Climate-induced droughts, desertification, wildfires, ocean acidification, and salinization (from rising sea levels) affect peoples' ability to fish, herd, and grow crops. Food production, food security and the enjoyment of the right to food are affected by shifting precipitation patterns, higher temperatures, extreme weather events, changing sea ice conditions, droughts, floods, algal blooms, and salinisation.¹⁵⁰ Trends suggest that climate change will lead to a rise in extinction rates for marine wildlife, particularly in warmer regions.¹⁵¹ Furthermore, the primary drivers of climate change—fossil fuel extraction and consumption, and deforestation—threaten crops and fisheries throughout the world. Courts in African jurisdictions have analysed States' obligations in relation to activities that might impact ecosystems and food production, concluding that States have the obligation to evaluate that a development proposal could have to an aquifer, especially considering climate change and water scarcity.¹⁵² Global warming linked with anthropogenic activities, methane emissions that also increase temperatures and ozone concentrations, and warmer and drier conditions, all are causing significant impacts on crop production, while ocean warming and ocean acidification is also negatively impacting fish populations.¹⁵³

States' failures to mitigate and adapt to the impacts of climate change therefore violate this element of the right to a healthy environment, and further threaten the independent right to food.

Safe and sufficient water as a substantive element of the right to a healthy environment refers to the importance of healthy watersheds providing fresh water to humans, biodiversity and ecosystems. Global warming can lead to drought, reducing peoples' ability to access safe and clean drinking water. It also impacts healthy rivers and watersheds. Likewise, the drivers of climate change—such as extractive industries like mining and the extraction, use and combustion of fossil

¹⁴⁹ *Ocean Report*, U.N. Doc. A/HRC/58/59, para. 96.

¹⁵⁰ *Boyd Mapping Report*, U.N. Doc. A/74/161 at para. 34.

¹⁵¹ Michael Fakhri (special rapporteur on the right to food), *Fisheries and the right to food in the context of climate change*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/55/49 at para. 41.

¹⁵² High Court of South Africa (Western Cape Division, Cape Town), *Philippi Horticultural Area Food & Farming Campaign et. Al. vs. MEC for Local Government, Environmental Affairs and Development Planning: Western Cape, et. al.*

¹⁵³ Bezner Kerr, R., T. Hasegawa, R. Lasco, I. Bhatt, D. Deryng, A. Farrell, H. Gurney-Smith, H. Ju, S. Lluch-Cota, F. Meza, G. Nelson, H. Neufeldt, and P. Thornton, 2022: Food, Fibre, and Other Ecosystem Products. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 713–906, doi:10.1017/9781009325844.007.

fuels—are a leading cause of water pollution. Safe and clean water as part of the right to a healthy environment complements the autonomous human right to water and sanitation. Within this framework, climate change threatens the four key elements of the rights to water and sanitation: availability, accessibility, acceptability, and quality.

The UN Global Water Bankruptcy Report explains African regions are already experiencing ‘anthropogenic droughts’ and that “drought and water scarcity are now implicated in a growing share of internal displacement events and are an important driver of projected internal water and climate-related migrations.”¹⁵⁴ The IPCC has recognised Africa as particularly vulnerable to water-related impacts of climate change, with many regions (such as the Turkana in Kenya) already experiencing severe impacts.¹⁵⁵ And because water plays an important role in many forms of energy generation, ensuring a just energy transition must also mean ensuring a just and sustainable water future.¹⁵⁶

States’ failure to meet their international obligations concerning climate change therefore violate this element of the right to a healthy environment. Such failures may also violate independent rights to water and sanitation.

A healthy environment encompasses *non-toxic environments* where people live, play, study, and work is also a substantial part of the human right to a clean, healthy and sustainable environment. Therefore, it is vital for this Court to clarify and highlight the obligation of States to prevent toxic contamination and implement actions to effectively assess existent toxic pollution, and implement actions to remediate it. For example, toxic air pollutants—such as ozone, nitrous oxide, and halogenated gases (such as CFCs and HCFCs)—are among the strongest drivers of climate change, many times more potent than carbon dioxide. They also have a toxic effect on peoples’ health and the environment. Eliminating these pollutants is one of the most powerful ways to secure the right to a clean, healthy and sustainable environment. Likewise, the elimination of legacy contaminants and plastics is a States’ duty and has important co-benefits in protecting individuals against dangerous toxins, and addressing drivers of climate change. Additionally, the UN Special Rapporteur on human rights and toxics has developed guidelines on access to justice and effective remedies in the context of toxics.¹⁵⁷ This set of 24 guidelines is highly relevant in the context of climate change, and can be of assistance to this Court in its Advisory Opinion.

¹⁵⁴ Kave Madani, *Global Water Bankruptcy: Living Beyond Our Hydrological Means in the Post-Crisis Era*, United Nations University Institute for Water, Environment and Health (UNU-INWEH) (2026) at 32-33.

¹⁵⁵ *Boyd Mapping Report*, U.N. Doc. A/74/161 at para. 38.

¹⁵⁶ Pedro Arrojo Agudo (special rapporteur on the right to safe drinking water and sanitation), *Water and energy nexus*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/60/30 (July 3, 2025).

¹⁵⁷ Marcos Orellana (special rapporteur on human rights and toxics), *Guidelines on access to justice and effective remedies in the context of toxics*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/60/34 (Aug. 8, 2025) [*Orellana Guidelines on Toxics Report*].

Procedural elements

The right to a healthy environment also encompasses procedural elements fundamental for its implementation. These include rights to: (a) access to information; (b) public participation; and (c) access justice and effective remedy. These rights are recognized in international and regional human rights law, including the ICCPR and the African Charter.

In the environmental context, the Inter-American Court has confirmed that such rights are inherent to the human right to a healthy environment.¹⁵⁸ The African Charter recognises these rights more generally: Article 9(1) provides that “[e]very individual shall have the right to receive information; Article 13 protects “the right to participate freely in the government of his country”; and Article 7 protects various rights concerning access to justice.

These rights are also reflected in the 1992 Rio Declaration, and expressly safeguarded in the Aarhus Convention and Escazú Agreement: two treaties which have over 60 state parties between them. In February 2025 the UN Special Rapporteur on environmental defenders under the Aarhus Convention, Mr. Michel Forst, published Guidelines on the Right to Peaceful Environmental Protest and Civil Disobedience, that can be also helpful in the interpretation of these rights as well.

The right of ***access to information*** creates a proactive duty for States. Adequate, effective and reliable information is essential to protect the environment and other human rights, including the rights to life, health, and integrity.¹⁵⁹ International human rights law—including article 19 of the Universal Declaration of Human Rights, article 19 of the ICCPR, and Article 9 of the African Charter—recognizes that everyone has the right to seek, receive and impart information. Information is fundamental in many ways. It helps everyone to understand how environmental harms have differentiated impacts on individuals and groups, depending on their situation of vulnerability; it helps communities and governments developing and implementing protective measures; and helps to advance accountability and guarantee non repetition when violations have occurred.

States have the obligation to provide access to environmental information that is affordable, effective, timely, accessible to everyone, accurate and reliable, including information related to the causes and consequences of climate change and environmental crises. States must make environmental information available to children and their parents and caregivers, and ensure it is accessible for different ages and capacities.¹⁶⁰

In relation to climate change, access to information is extremely important for many reasons, including the highly technical and complex scientific information that can be difficult to

¹⁵⁸ *IACtHR Advisory Opinion No. 23/17*.

¹⁵⁹ *Implementation Report*, U.N. Doc. A/79/270, at para. 40.

¹⁶⁰ *Implementation Report*, U.N. Doc. A/79/270 at para. 41, citing *Framework Principles Report*, U.N. Doc. A/HRC/37/59, *Committee on the Rights of the Child General Comment 26* and David R. Boyd, *Special Rapporteur on the human right to a clean, healthy and sustainable environment, The Right to a Healthy Environment: A User’s Guide* (Geneva, OHCHR, 2024).

understand for the lay person, thus requiring the State to make sure that it is provided in a way that it is understandable. The right to access climate-related information enables individuals to understand how environmental harm may undermine their human rights, and is closely linked to the right to science.¹⁶¹ Access to information is also fundamental and should be reliable, timely, accessible and understandable in relation to disasters, as inadequate or lack of information can exacerbate risks to human rights. Additionally, peoples' affected by climate change are less likely to be able to seek out environmental information and participate in public processes. States accordingly have a proactive obligation to provide people with accessible, affordable and understandable information regarding the causes and consequences of climate change.¹⁶² Such information should include information concerning potential and actual negative impacts of climate change on human rights (to support the public's resilience and adaptive capacities to respond), and should outline proposed and ongoing climate response measures and their impact on human rights.¹⁶³

Since 2006 the Inter-American Court of Human Rights has held that the principle of maximum disclosure is indispensable in democratic societies including in relation to environmental information. The Court clarified that environmental information is of public interest. According with the Court, authorities must be governed by the presumption that all information is made accessible, and only restricted in narrow, legally established exceptions.¹⁶⁴ The "obligation of active transparency", requires States "to provide accurate, updated, understandable information on the environment ... includ[ing] information on environmental quality, environmental impact on health and the factors that influence this, and also information on legislation and policies, as well as assistance on how to obtain such information".¹⁶⁵

Active transparency is vital for the enjoyment of other rights, especially regarding matters of public interest, such as information related to the exploration and exploitation of natural resources. It is also fundamental to enabling public participation, and allows for States to take the best decisions based on the public interest, helping to incorporate best available science and even prevent conflict of interests and undue influence.

The European Court of Human Rights has also concluded that States have the obligation to establish accessible procedures guaranteeing the availability of relevant information when engaged in hazardous activities,¹⁶⁶ and that furthermore, failure to guarantee access to information to

¹⁶¹ Morgera Access to Information and Climate Change Report, U.N. Doc. A/79/176 at paras. 3-4.

¹⁶² *Boyd Climate Report*, U.N. Doc. A/74/161 at para. 64(a).

¹⁶³ *Morgera Access to Information and Climate Change Report*, U.N. Doc. A/79/176 at para. 9.

¹⁶⁴ See *Claude Reyes v Chile* (2006) Series C No 151 (IACtHR, Sept. 19, 2006) at paras. 77 and 92, and *La Oroya v Peru* at para. 146.

¹⁶⁵ *IACtHR Advisory Opinion No. 23/17*.

¹⁶⁶ See *McGinley and Egan v United Kingdom* App nos 21825/93 and 23414/94 (ECtHR, June 9, 1998); *Roche v United Kingdom* App no 32555/96 (ECtHR, Oct. 19, 2005).

journalists reporting on climate change and environmental degradation, when not prescribed by law, violates article 10 of the European Convention on Human Rights.¹⁶⁷

States should ensure the accessibility of environmental information; refuse or make conditional access to such information only on narrow, relational, and prescribed grounds, and establish independent oversight mechanisms. This includes an obligation on States—recognised in multilateral climate treaties—to proactively promote and facilitate awareness and education on the climate emergency and its impacts.¹⁶⁸

Public participation is essential for guaranteeing a healthy environment and it is also recognised as a human right. Many African domestic courts have recognised such a right, particularly in the context of permitting or limiting infrastructure and activities related to fossil fuels.¹⁶⁹ Public participation is crucial in producing climate policies that draw on a wide knowledge base; identify and protect threatened rights; and are sustainable and robust.¹⁷⁰ Public participation should include *all* affected and interested individuals, especially those who are marginalised or in more vulnerable situations. Effective participation depends on a host of other rights, including those to expression, association, and assembly. The obligation to enable public participation is a proactive one: governments must take positive steps to involve citizens in decision-making, including decisions related to the climate emergency, such as mitigation and adaptation policies. This includes (but is not limited to) an obligation to consult widely. As discussed below, it also includes an obligation to carry out environmental, social and human rights impact assessment. Public participation in the context of climate change is also recognised in the UNFCCC.¹⁷¹

The core of the right of **access to justice** is the provision of effective remedies for violations of human rights, including those related to a healthy environment and the climate crisis. Affected individuals should have access to remedies against government authorities *and* private entities.¹⁷² The right to remedy is an independently recognized human right.¹⁷³ In relation to the environment, States should provide for access to effective remedies for violations of human rights and domestic laws. Effective justice includes simple, affordable, accessible and timely processes, and the accountability of States and businesses, as well as those responsible for lack of compliance with

¹⁶⁷ See *Hajiyev v Azerbaijan*, App nos 19925/12 and 47532 (Dec. 9, 2021).

¹⁶⁸ UNFCCC art. 6(a); Paris Agreement art. 12. See also *Morgera Access to Information and Climate Change Report*, U.N. Doc. A/79/176.

¹⁶⁹ *Save Lamu; Groundwork Trust*.

¹⁷⁰ *Knox Climate Report*, U.N. Doc. A/HRC/31/52 at para. 58; *Framework Principles Report*, U.N. Doc. A/HRC/37/59 at paras. 23-26 (Principle 9); *Morgera Access to Information and Climate Change Report*, U.N. Doc. A/79/176.

¹⁷¹ UNFCCC art. 6(6).

¹⁷² Ian Fry (special rapporteur on human rights and climate change), *Promotion and protection of human rights in the context of climate change*, Report to the UN General Assembly, U.N. Doc. A/77/226 (July 26, 2022) at para. 97; *Implementation Report*, U.N. Doc. A/79/270; Elisa Morgera (special rapporteur on human rights and climate change), *Scene-setting report*, Report to the UN General Assembly, U.N. Doc. A/HRC/56/46 (July 24, 2024) at para. 54.

¹⁷³ See Universal Declaration of Human Rights, arts. 8 and 10.

environmental, human rights or climate laws.¹⁷⁴ Granting access to justice in relation to any right, including a healthy environment, requires that effective remedies encompass all elements of the right, and also all subjects of this right. Therefore, in the case of a healthy environment, States must guarantee access to justice that recognise both the individual and the collective dimension of this right. In consequence, States have the duty to guarantee the existence and actual exercise of access to justice, including through legal actions that recognise standing to sue, participation in legal processes and remediation for both individually and collectively.

In the context of climate change, the right of access to justice demands that individuals and communities should be able to seek redress and receive a fair hearing for climate-related harms. States should ensure that restrictive procedural or standing rules do not prevent individuals, communities or civil society organisations from bringing climate-related rights-based lawsuits. They should also guarantee an environment in which civil society actors are free from intimidation.

States have been held internationally responsible for failing to grant effective access to justice and remedies in situations related to the environment and climate,¹⁷⁵ including regarding climate-related impacts.¹⁷⁶ The lack of enforcement of laws or judgments can also result in international responsibility of States. Examples of these cases include severe impact to the rights to live, health and a healthy environment threatened by industrial activities, such as extractive industries and metal smelting, and thus, the obligation of States is making sure that there is no risk to peoples' rights and that effective measures are in place to avoid repetition of these situations. These measures encompass adequate regulations, assessment and prevention of risks, remediation of damages, as well as ensuring adequate, effective, timely and easily available information regarding the risks and impacts that such activity might have. Additionally, guaranteeing access to justice include ensuring a safe environment for those seeking justice and as it will be described below, highlighting that access to justice is a human right and thus, using courts and tribunals is a peaceful act that people and movements use, showing their willingness to use existent institutional paths to solve potential or existent conflicts.

States should ensure procedures and institutions that are: (a) impartial, independent, affordable, transparent and fair; (b) review claims in a timely manner; (c) have necessary expertise and resources; (d) incorporate a right of appeal; and (e) issue legally-binding decisions;¹⁷⁷ and (f) comply with decisions. In some African States, such as Kenya, States have institutionalized this duty through the establishment of specialized environmental courts. As mentioned, the guidelines

¹⁷⁴ *Implementation Report*, U.N. Doc. A/79/270 at para. 48, citing *Claude Reyes v Chile* (2006) Series C No 151 (IACtHR, Sept. 19, 2006); *Boyd Mapping Report*, U.N. Doc. A/74/161 and *Framework Principles Report*, U.N. Doc. A/HRC/37/59, Principle 10.

¹⁷⁵ See *Öneyildiz v Turkey*, App no 48939/99 (ECtHR, Nov. 30, 2004); *Budayeva v Russia*, App nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02 (ECtHR, Mar. 20, 2008); *La Oroya v Peru*.

¹⁷⁶ See *Verein Klimaseniorinnen Schweiz v Switzerland* (ECtHR); *La Oroya v Peru* (IACtHR).

¹⁷⁷ *Framework Principles Report*, U.N. Doc. A/HRC/37/59 at para. 29 (Principle 10).

proposed by the UN Special Rapporteur on toxics in relation to access to justice can also be of assistance to further clarify effective tools for States to guarantee access to justice.

c. Obligation to uphold human rights in the context of climate-induced migration and displacement

States have particular obligations in the context of climate-induced migration and displacement. Individuals and peoples living in low-lying coastal areas, SIDSs, and areas subject to climate-induced desertification and extreme weather events, are at a particularly high risk of such displacement. Climate change risks making such regions uninhabitable, and increases conflict which forces people and communities from their homes. Such displacement occurs both within and between States.

It should be noted that States' primary duty in this context is a *preventive* one. As discussed above, the harm prevention principle sits at the core of States' treaty-based and customary international obligations and human rights. It is not sufficient for States only to respect the principle of non-refoulement. States must proactively pursue effective climate mitigation and adaptation measures—including advocacy for mitigation and adaptation finance at the international level—to ensure that individuals and peoples are not displaced in the first place, and thus, do not face significant risks to their human rights.

International courts and tribunals have recognised that States' migration-related duties under international law apply with particular force in the context of climate change. In its *Advisory Opinion on Climate Change*, the ICJ confirmed that States owe obligations to people displaced by climate change, derived from the right to life recognised in the ICCPR. Drawing on an earlier decision of the Human Rights Committee (*Teitiota v. New Zealand*), the ICJ observed that:¹⁷⁸

... conditions resulting from climate change which are likely to endanger the lives of individuals may lead them to seek safety in another country or prevent them from returning to their own. In the view of the Court, States have obligations under the principle of non-refoulement where there are substantial grounds for believing that there is a real risk of irreparable harm to the right to life in breach of Article 6 of the ICCPR if individuals are returned to their country of origin.

When prevention of displacement or migration is not possible, then States should guarantee that individuals and communities displaced by climate change can enjoy their fundamental rights throughout their journey and upon arrival in host countries.¹⁷⁹ These rights include “the provision of food and clean water; access to adequate housing, health care and social security, education and

¹⁷⁸ ICJ *Advisory Opinion* at para. 378, citing *Teitiota v New Zealand*, Human Rights Committee, U.N. Doc. CCPR/C/127/D/2728/2016 (Oct. 24, 2019).

¹⁷⁹ Office of the High Commissioner on Human Rights, *Recommended Principles and Guidelines on Human Rights at International Borders* (2014).

decent work opportunities; and safeguarding the principles of non-refoulement and the prohibition of collective expulsion, as well as the rights to liberty, personal integrity and family unity.”¹⁸⁰ Considering the lack of express recognition and specific measures to protect people forced to migrate due to climate related impacts, States must develop effective measures to improve and enhance safe legal pathways for admission and protection, including humanitarian protection and complementary protection under human rights law.

d. Climate and the right to life and right to health

The climate emergency threatens the right to life, as protected under Article 4 of the African Charter. Climate change is impacting many systems in the planet, causing extreme weather events, heat waves, floods, droughts, wildfires, sea level rise, air pollution, ocean acidification, water-borne and vector-borne diseases, water scarcity, and food insecurity. “[A]t its most extreme, climate change kills”.¹⁸¹ The UN Human Rights Committee has observed that the right to life “extends to reasonably foreseeable threats to life-threatening situations that can result in loss of life” (including environmental causes), and that States have a duty “to take positive measures”, including an obligation of due diligence, before a right is directly threatened.¹⁸² In *Billy v. Australia*, the Committee found that a State may breach its citizens’ right to life in the context of climate change where it exposes individuals “to a situation of physical endangerment or extreme precarity”, especially where an entire community faces the risk of being submerged.¹⁸³ Similar conclusions have been reached by the UN Committee on the Rights of the Child.¹⁸⁴ The ICJ recently observed that “[r]espect, protection and fulfilment of [the right to life] may depend on measures taken by States ... to preserve the environment and protect it against the adverse effects of climate change caused by anthropogenic GHG emissions”.¹⁸⁵ The Court found such an obligation was particularly salient in the context of the rights of children¹⁸⁶ and migrants.¹⁸⁷

This Court has likewise recognised the relevance of the right to life in the context of environmental harm. In *LIDHO v Cote d’Ivoire*, this Court adopted the jurisprudence of the Human Rights Committee and observed that:

¹⁸⁰ Office of the High Commissioner on Human Rights, *Key Messages on Human Rights*, para. 1.

¹⁸¹ *Boyd Climate Report*, U.N. Doc. A/74/161, para. 29.

¹⁸² Human Rights Committee, *General Comment No 36: Article 6: Right to Life* U.N. Doc. CCPR/C/GC/36 (Oct. 30, 2018).

¹⁸³ *Billy v Australia*, Human Rights Committee, U.N. Doc. CCPR/C/135/D/3624/2019 (Sept. 22, 2022) at paras. 8.6-8.7.

¹⁸⁴ *Committee on the Rights of the Child General Comment 26* at paras. 20-25.

¹⁸⁵ *ICJ Advisory Opinion* at para. 377.

¹⁸⁶ *Id.*

¹⁸⁷ *Id.* at para. 378.

The Court recalls that State parties must take appropriate measures to protect persons against deprivation of life by other States, international organizations and foreign companies operating on their territory or in other areas under their jurisdiction. They must also take legislative or other measures to ensure that any activity taking place in all or part of their territory or in other locations under their jurisdiction must be compatible with Article 4 of the Charter. Such an obligation applies to all acts having direct and reasonably foreseeable impact on the right to life of persons outside their territory, including activities carried out by companies based in their territory or under their jurisdiction.¹⁸⁸

The climate crisis also threatens the right to health, as protected by Article 16 of the African Charter. Realisation of the right to health depends on an enabling natural environment, including a safe climate system and clean air. The UN Committee on the Rights of the Child has emphasised that threats to the right to health are particularly acute for children, including impacts on children's mental health arising from depression and eco-anxiety.¹⁸⁹ As mentioned, children are more vulnerable and that there is therefore a higher risk to their health and life linked with environmental degradation and exposure to pollution.

e. The right to equality and non-discrimination

The climate crisis threatens the right to equality and non-discrimination, recognized in Articles 1 and 2 of the African Charter. Climate change is deeply linked to inequality. The IPCC has concluded that only 10% of households globally with “highest per capita emissions contribute 34-45% of global consumption-based household GHG emissions, while the bottom 50% contribute 13-15%”.¹⁹⁰ Climate change is a problem produced in large part by unlimited growth with unequal benefits, debt traps (which hobble sustainable development in African States), and growing gaps between rich and poor. As the impacts of climate change intensify, these inequalities are exacerbating and continue increasing. People living in vulnerable regions, people who are forced to migrate, and people who rely on subsistence farming and fisheries, are being disproportionately affected and will continue being so if adequate measures are not in place.

Globally, as the Inter-American Court of Human Rights has observed, people living in poverty are more likely to live in climate-vulnerable areas, face greater losses from disasters and have fewer resources to help them recover.¹⁹¹ Due to existent inequalities, “States are legally obliged to

¹⁸⁸ *LIDHO v. Cote d'Ivoire* at para. 135.

¹⁸⁹ *Committee on the Rights of the Child General Comment 26* at paras. 37-44.

¹⁹⁰ Intergovernmental Panel on Climate Change (IPCC), Sixth Assessment Report (AR6), Synthesis Report, Summary for Policymakers, A.1.5.

¹⁹¹ *LACtHR Advisory Opinion No. 32/25* at paras. 624-625.

confront these vulnerabilities based on the principle of equality and non-discrimination”.¹⁹² As discussed below, already marginalised groups—such as women, children, and people with disabilities—will experience disproportionate hardship. When poverty intersects with gender, age or disability, the situation of vulnerability multiplies.¹⁹³

f. Intergenerational equity and future generations

States’ environmental and climate-related obligations are informed by the **principle of intergenerational equity** that is recognized in many international instruments¹⁹⁴ and is reflected in international law jurisprudence.¹⁹⁵ This includes the core climate treaties including the UNFCCC (article 3(1)) and the Paris Agreement Preamble. The UN Committee on the Rights of the Child has confirmed that the principle of intergenerational equity is clearly applicable when considering the human rights obligations that States owe toward existing children, in relation to both present and future harms.

Intergenerational equity is relevant to the rights of children living today, and those of future generations who may not yet be born. It requires States to act as responsible stewards of the planet, protect the interests of future generations, and ensure that they will be able to meet their development and environmental needs.¹⁹⁶ The ICJ has defined it as “an expression of the idea that present generations are trustees of humanity tasked with preserving dignified living conditions and transmitting them to further generations”.¹⁹⁷ The principle of intergenerational equity also calls attention to the collective rights that future generations hold.

This responsibility and intergenerational equity related to the use and accountability related to the environment between generations, making sure that present generations do not use and impact the environment at a point to compromise or negatively affect how future generations will live and their rights. It implies being aware of the Earth’s planetary boundaries that must be considered and respected by present generations, in order to avoid impacting future generations. It is a principle

¹⁹² *LACtHR Advisory Opinion No. 23/17* at para. 67, citing Human Rights Council, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009), para. 42, and *Knox Climate Report*, U.N. Doc. A/HRC/31/52 at para. 81.

¹⁹³ *Clean Air Report*, U.N. Doc. A/HRC/61/47 at para. 18.

¹⁹⁴ See, e.g., Stockholm Declaration, Principles 1 and 2; Rio Declaration, Principle 3; UNFCCC, Art. 3, Principle 1; UNESCO Declaration on the Responsibilities of the Present Declaration on the Responsibilities of the Present Generation towards future Generations (Nov. 12, 1997); Paris Agreement, Preamble (2015).

¹⁹⁵ *Pulp Mills*, Sep. Op. Judge Cançado Trindade, para. 122; *Case concerning the Gabčíkovo-Nagymaros Project (Hung. v. Slov.)*, (Sept. 25, 1997), Sep. Op. Judge Weeramantry, ICJ Rep 7, ICJ Rep 88 at 106-108; Committee on Economic, Social and Cultural Rights, *General Comment No 15: The right to water*, U.N. Doc. E/C/12/2002/11 (Jan. 20, 2003) at para. 28.

¹⁹⁶ Office of the United Nations High Commissioner for Human Rights, Analytical Study on the Relationship Between Climate Change and the Full and Effective Enjoyment of the Rights of the Child, U.N. Doc. A/HRC/35/13 (May 4, 2017), para. 35.

¹⁹⁷ *ICJ Advisory Opinion* at para. 156.

that many Indigenous Peoples also follow and incorporate in their traditions. The current triple planetary crises, including climate change, evidences that excessive consumption and pollution by some generations may impact the rights of future generations and thus, ignoring the intergenerational equity.

The 2023 Maastricht Principles on The Human Rights of Future Generations interpret and synthesize obligations owed toward future generations that are derived from international law. International Courts, Special Procedures and treaty bodies have used the Maastricht Principles as an interpretative source to advance and clarify obligations in relation to the rights of future generations.¹⁹⁸ I encourage the African Court to also use these Principles that can be helpful to better understand existent recognition and interpretation of such rights.

Future generations include living children and those constantly arriving, both of whom are entitled to the realization of their human rights.¹⁹⁹ As the Maastricht Principles put it, “[human generations exist within an unbroken community that is continually renewed and redefined as untold new members join the living human community. Any treatment of human generations and their respective rights must recognize and reflect this continuum”.²⁰⁰

3. Positive obligations of States to protect vulnerable populations, including environmental human rights defenders, Indigenous Peoples, women, children, the elderly, and people with disabilities (question (d) in the Advisory Opinion Request)

Environmental degradation and climate change affects everyone, however in a differentiated way. Systemic inequalities, discrimination and historical exclusion results in disproportional impacts to marginalised peoples and communities. Marginalised persons and communities in vulnerable situations include children and youth, women, Indigenous Peoples, racial and ethnic groups (including people of African descent), migrants, refugees, internally displaced persons, informal settlers, persons in detention, persons in situations of homelessness, peasants, fisherfolk, persons with disabilities, and older persons.²⁰¹

It is vital to consider that these vulnerabilities are neither normal, nor natural nor *sine qua non* to peoples and communities, and, with the exception of children and exceptional situations, these vulnerabilities result from systemic exclusion and discrimination. I therefore refer to “people in marginalised situations” rather than to “vulnerable peoples”, to avoid revictimization and

¹⁹⁸ See e.g. *IACtHR Advisory Opinion No. 32/25* at para.307.

¹⁹⁹ *Committee on the Rights of the Child General Comment 26* at para. 11.

²⁰⁰ Maastricht Principles, Preamble at III.

²⁰¹ See *Morgera Scene-Setting Report*, A/HRC/56/46; *Gender Dimensions of Trafficking Report*, U.N. Doc.A/77/170; Balakrishnan Rajagopal (Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context), *Towards and just transformation: climate crisis and the right to housing*, U.N. Doc. A/HRC/52/27 (Dec. 23, 2022); Saad Alfarargi (Special Rapporteur on the right to development), *Climate action at the national level*, U.N. Doc. A/HRC/48/56 (July 2, 2021).

normalizing the existence of vulnerabilities that can and must be transcended. With the Advisory Opinion the African Court has a historic opportunity to recognise the rights of marginalised people and clarify the obligation of States to implement positive actions to address such marginalisation towards substantive equality, transcending existent systemic inequalities.

All States, when acting to respect, protect and fulfil human rights, must act consistently with obligations of equality and non-discrimination. Regionally, as the Inter-American Court has observed, “States are legally obliged to confront these vulnerabilities based on the principle of equality and non-discrimination”.²⁰² This obligation follows from Articles 2 and 3 of the African Charter, which provide that protected rights apply “without distinction of any kind”, that “[e]very individual shall be equal before the law”, and entitled to its equal protection. It also follows from both the International Covenant on Civil and Political Rights (Article 2), and Article 2(2) of the International Covenant on Economic, Social and Cultural Rights. The Paris Agreement clarifies that the obligation of non-discrimination must be immediately realised: it is not subject to progressive realisation or differentiated implementation between States.²⁰³

In environmental matters, States must avoid both direct and indirect discrimination.²⁰⁴ States’ climate policies should proactively reduce historical or systemic discrimination, for example by effectively enforcing environmental laws in relation to polluting activities including when these are impacting marginalised communities, such as coal-power plants, or allowing polluting industries to form “sacrifice zones”. When fulfilling procedural obligations, States should remove barriers that individuals, groups, and communities might face in receiving information, participating in decision-making, or seeking remedies. States should also ensure that the burdens of mitigation or adaptation activities do not fall disproportionately on persons or communities in vulnerable situations. This requires that States proactively consider whether activities might result from, or contribute to, existing patterns of discrimination, considering the heightened barriers to justice that such groups experience.²⁰⁵ States should avoid indirect differential treatment, and permit it only where such treatment meets strict requirements of legitimacy, necessity, and proportionality.

In recognizing the needs of people in vulnerable situations, States, international organizations, and businesses should incorporate principles of inclusion, meaningful participation, and intersectionality into climate action.²⁰⁶

²⁰² *LACtHR Advisory Opinion No. 23/17*, para. 67, citing Human Rights Council, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009), para. 42, and *Knox Climate Report*, U.N. Doc. A/HRC/31/52 at para. 81.

²⁰³ Paris Agreement Preamble, Articles 7.5 & 7.9.

²⁰⁴ *Committee on the Rights of the Child General Comment 26*, para. 16.

²⁰⁵ *Framework Principles Report*, U.N. Doc. A/HRC/37/59, at para. 9 (Principle 3); *Committee on the Rights of the Child General Comment 26*, para. 14.

²⁰⁶ *Morgera Scene-Setting Report*, A/HRC/56/46. See also the Enhanced Lima Work Programme on Gender and its gender action plan, Decision 3/CP.25 (Dec. 12, 2019), Preamble [*Enhanced Lima work program*].

Environmental, climate, and human rights defenders are protected by a range of human rights and yet are routinely subjected to stigmatization, threats, harassment, intimidation, violence and criminalisation. Defenders from groups in vulnerable situations, such as women, girls, Indigenous Peoples, peasants, small fisher communities, pastoralists, and people of African Descent face particular threats to their lives and personal integrity. Environmental defenders' rights to freedom of expression, assembly, association, and participation are protected by the African Charter and must be protected by States. Any restrictions on these rights—such as those in the name of national security or public safety—are permissible only in narrow circumstances and with compelling justification.²⁰⁷ The UN Human Rights Council has affirmed the obligation of States “[t]o promote a safe and enabling environment in which individuals, groups and organs of society, including those working on human rights and environmental issues, including biodiversity, can operate free from violence, threats, hindrance and insecurity”.²⁰⁸

There are now two human rights treaties which specifically address access rights in environmental contexts, that are fundamental tools for environmental defenders: the Aarhus Convention, ratified by 47 European States and Guinea-Bissau, and the Escazú Agreement, ratified by 19 States in Latin America and the Caribbean. There is no African regional treaty focussed on procedural rights and the rights of environmental human rights defenders, nevertheless, States hold general obligations under the African Charter to respect, protect and fulfil the rights of environmental defenders.

The generally applicable human rights of a healthy environment, expression, assembly, association and participation should be applied rigorously to African environmental defenders. To define the substance of these rights, it is helpful to look to regional treaties elsewhere which have applied them in the context of environmental defenders to complement its interpretation.

The rights of environmental human rights defenders demand proactive and positive actions by States. For instance, the Escazú Agreement, provides that States should “guarantee a safe and enabling environment... so that they are able to act free from threat, restriction and insecurity”; take “effective measures to recognize, protect and promote *all* the rights of human rights defenders in environmental matters”, and “take appropriate, effective and timely measures to prevent, investigate and punish attacks, threats or intimidation that human rights defenders in environmental matters may suffer”.²⁰⁹ States should protect individual and collective

²⁰⁷ For rare circumstances in which such restrictions may be justified, see Mary Lawlor (UN Special Rapporteur on the situation of human rights defenders), *Tipping points: human rights defenders, climate change and just transition*, A/80/114, July 4, 2025 [*Tipping Points Report*]; *Framework Principles Report*, U.N. Doc. A/HRC/37/59, at para. 13 (Principle 5).

²⁰⁸ UN Human Rights Council, *Resolution 40/11: Recognizing the contribution of environmental human rights defenders to the enjoyment of human rights, environmental protection and sustainable development*, U.N. Doc. A/HRC/RES/40/11 (April 2, 2019).

²⁰⁹ Escazú Agreement (Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, adopted Mar. 4, 2018, entered into force Apr. 22, 2021) art. 9(1), (2), (3)

environmental, climate and land defenders and prosecute and punish those who stigmatize and threaten their rights or their work. In addition to positive measures to protect environmental human rights defenders, and making sure that public officials also abstain of any stigmatization and threat, States must comply with environmental obligations, guarantee non repetition of violations, and advance justice and truth, avoiding impunity in relation to violations against defenders.

States should also refrain from criminalising climate activists. Such criminalisation, as well as the imposition of civil penalties (for example, through overbroad defamation and libel laws) has a chilling effect on the exercise of protected rights, and on civic space for the general public.²¹⁰

Several UN bodies have identified and developed States' obligations to protect environmental human rights defenders. The UN Human Rights Council has emphasised the important role played by environmental defenders, and called upon States to (among other things) "adopt and implement strong and effective laws and policies" protecting their procedural rights, provide a "safe and empowering context" for initiatives led by children and young people, and to provide a "safe and enabling environment" in which defenders "can operate free from violence, threats, hindrance, and insecurity".²¹¹ The UN Special Rapporteur on Environmental Defenders under the Aarhus Convention has likewise issued Guidelines on the Right to Peaceful Environmental Protest and Civil Disobedience. The Guidelines call on States to (among other things) "[t]ake immediate action to counter narratives that portray environmental defenders as criminals"; refrain from using environmental protest "as a pretext to restrict the civic space and the exercise of fundamental freedoms"; comply with international obligations to "refrain from using unnecessary or disproportionate force or measures against environmental defenders"; and "[e]nsure that the courts' approach to peaceful environmental protest, including any sanctions imposed, does not contribute to the restriction of civic space".

The Inter-American Court of Human Rights has extensively discussed the rights of environmental and other human rights defenders. It has held that they enjoy an autonomous right to defend human rights and that States owe them a special duty of protection.²¹² This duty requires States to avoid stigmatizing human rights defenders, delegitimizing their causes, or creating formal or informal obstacles to their activities. It also requires States to create a safe enabling environment in which defenders can act free from threats, restrictions, or risks to their life, integrity, or work. The Court has specified that States must (i) identify structural causes of violence and harassment against defenders; (ii) collect disaggregated data on threats, attacks, disappearances and killings; and (iii) design and implement, in genuine consultation with defenders, comprehensive public policies and national protection programs that are intersectional and gender-sensitive, with specific measures for particularly exposed groups (including Indigenous, rural and peasant communities, women

²¹⁰ *Tipping Points Report* U.N. Doc. A/80/114.

²¹¹ *UN Human Rights Council Resolution 40/11: Recognizing the contribution of environmental human rights defenders to the enjoyment of human rights, environmental protection and sustainable development*, U.N. Doc. A/HRC/RES/40/11 (Mar. 21, 2019).

²¹² *IACtHR Advisory Opinion no. 32/25* at paras. 561-567.

defenders, and journalists covering environmental matters).²¹³ Protection mechanisms must be independent from security and intelligence services, adequately funded, technically capable, and coordinated, and must ensure the participation of beneficiaries in risk assessments and in the design and adjustment of protective measures. The Court has further held that States are under an enhanced due diligence obligation to investigate promptly, seriously, and impartially all threats, attacks, harassment and killings linked to the defence of human rights, to exhaust lines of inquiry related to the victim's work as a defender, to identify both direct perpetrators and masterminds, and to combat patterns of impunity through, among other things, specialised investigative units and protocols.²¹⁴ Finally, the Court has underscored that "criminalization" of environmental defence—in particular the recurrent, selective use of criminal, administrative or civil procedures (including SLAPP-type actions) to intimidate or silence defenders—contravenes these obligations. States must review and amend such laws, ensure that abusive proceedings are promptly dismissed, and train justice and security officials so that criminal law is not misused to suppress legitimate human rights or environmental advocacy.²¹⁵

Children and youth are particularly vulnerable to health problems exacerbated by climate change and environmental degradation, including vector-borne diseases, malnutrition, acute respiratory infections, water-borne illnesses.²¹⁶ It has been estimated that 88% of the global disease burden associated with climate change is borne by children under the age of five.²¹⁷ Extreme weather events pose unique threats to the health and well-being of young bodies and minds. Globally, over 500 million children live in extremely high-risk flood zones; 160 million live in high or extremely high drought severity zones; and 115 million are at high risk from tropical cyclones. By 2040, almost 600 million children will live in regions with extremely limited water resources. Over 700,000 children under 5 years of age died in 2021 from causes linked to air pollution and fossil fuels.²¹⁸ The United Nations Children's Fund (UNICEF) warns that "climate change will harm the poorest and most vulnerable children first, hardest and longest."²¹⁹

The climate crisis poses particular challenges to children's right to health, protected under the International Covenant on Economic, Social and Cultural Rights and by Article 24 of the UN Convention on the Rights of the Child. The impact of the climate emergency on children and youth

²¹³ *Id.* at paras. 566-578.

²¹⁴ *Id.* at. 581-586.

²¹⁵ *Id.* at 587.

²¹⁶ Human Rights Council, *Report of the Office of the United Nations High Commissioner for Human Rights, Analytical study on the relationship between climate change and the full and effective enjoyment of the rights of the child*, U.N. Doc. A/HRC/35/13 (June 23, 2017).

²¹⁷ Ying Zhang, et al., *Climate change and disability-adjusted life years* (2007) 70 *Journal of Environmental Health* 32.

²¹⁸ *Clean Air Report*, U.N. Doc. A/HRC/61/47 at para. 11.

²¹⁹ UNICEF, *unless we act now: The impact of climate change on children* (2015).

is particularly stark. It is also twofold: as the UN Committee on the Rights of the Child has observed, children are “particularly impacted by the effects of climate change, both in terms of the manner in which they experience such effects as well as the potential of climate change to affect them throughout their lifetime,”²²⁰ including mental health effects such as depression and eco-anxiety.²²¹

Thus, States’ obligations to respect, protect, and fulfil children’s rights should be a top priority, requiring States to take urgent, just, effective, and positive measures.²²² States have a “heightened duty of care” toward children, who “are far more likely than adults to suffer serious harm.”²²³ As a consequence of the higher risk for children and stricter duty of care, States should take the best interests of children into account as a primary consideration in all policies.²²⁴ While States “retain discretion in arriving at a reasonable balance between determining the appropriate levels of environmental protection and achieving other social goals,” States should nevertheless acknowledge the serious harms that the climate emergency produces for children, “and therefore set and enforce environmental standards that protect children from such disproportionate and long-term effects.”²²⁵

Furthermore, under international human rights law, all children have the right to be heard, to participate, and to access information.²²⁶ The realization of these rights improves environmental decision-making as also expressly recognised by the CRC, that concluded that children should be involved in States’ decision-making concerning the need for policy responses to the climate emergency, as well as the design and implementation of such policies. States should identify decisions and policies with particular impacts on children and conduct a more detailed procedure (a child rights impact assessment) to determine children’s best interests.²²⁷ Children’s views should be proactively sought, with additional support given to children with disabilities, children belonging to marginalised groups, and children living in vulnerable areas. Children should be provided with age-appropriate, safe and accessible mechanisms to make their voices heard, and should be provided with meaningful and effective education concerning the climate emergency and human rights.²²⁸ Children have the right to access accurate and reliable information concerning the causes, effects, and actual and potential sources of climate harm, as well as State responses.²²⁹

²²⁰ *Sacchi v. Argentina* (Committee on the Rights of the Child) U.N. Doc. CRC/C/88/D/104/2019 (Oct. 11, 2021) at 12.

²²¹ AR6 Working Group II, *Summary for Policymakers*, at 7.2.5.1.

²²² *Billy v. Australia*, UN Human Rights Committee; *Sacchi v. Argentina*, Committee on the Rights of the Child.

²²³ *Committee on the Rights of the Child General Comment 26*, para. 73.

²²⁴ Convention on the Rights of the Child (adopted Nov. 20, 1989, entered into force Sept. 2, 1990) 1577 UNTS 3 -at article 3.

²²⁵ *Committee on the Rights of the Child General Comment 26*, para. 73.

²²⁶ Convention on the Rights of the Child article 12.

²²⁷ *Committee on the Rights of the Child General Comment 26* at para 26.

²²⁸ *Id.* at para. 27.

²²⁹ *Id.* at para. 33.

Dissemination of information should be appropriate to children’s age and capacities.²³⁰ In line with the principle of cooperation, States parties to the Convention should facilitate regional and international mechanisms for child and youth participation in decision-making.²³¹ Children and youth should be included in national delegations at climate negotiations and other international climate events. Participatory and rigorous child rights impact assessments must be integrated into existing ESHRIA processes.²³²

All State policies and actions concerning the climate emergency should comply with the UN Convention on the Rights of the Child, which has been ratified by all State parties to the African Charter. The UN Committee on the Rights of the Child has found that the following actions are necessary to ensure States’ compliance with that Convention:

- specifying how national policies—including nationally determined contributions—respect, protect and fulfil children’s rights;
- meeting the principles of highest possible ambition and common but differentiated responsibilities, while protecting children’s rights to the maximum possible extent;
- progressively increasing the ambition of mitigation action over time, keeping in mind that the time frame for preventing catastrophic climate change and harm to children’s rights is short and requires urgent action;
- avoiding delays to a rapid phase out of fossil fuels, which would result in higher cumulative emissions and thereby greater foreseeable harm to children’s rights; and
- avoiding reliance on unproven technologies and instead prioritising rapid and effective emissions reductions now to support children’s full enjoyment of their rights in the shortest possible period of time and to avoid irreversible damage to nature.²³³

Women and girls are particularly vulnerable to the effects of climate change.²³⁴ In Africa the special situation of women is acknowledged in the Maputo Protocol, which states that women shall have a particular right to “live in a healthy and sustainable environment”.²³⁵ However, women, faced systemic and historical discrimination, suffering from greater inequalities, resulting in fewer recognition and resource to prevent impact, and react and face potential climate impacts. For example, differences in ownership of household assets, greater familial responsibilities, food insecurity, water and fuel scarcity, and heightened disaster exposure can “undermine women’s

²³⁰ *Id.* at para. 28.

²³¹ *Id.* at para. 28.

²³² *ESHRIA Report*, U.N. Doc. A/80/187 at para. 85, citing *Committee on the Rights of the Child General Comment 26*.

²³³ *Committee on the Rights of the Child General Comment 26*.

²³⁴ *Implementation Report*, U.N. Doc. A/79/270 at paras. 95-98.

²³⁵ Protocol to the African Charter on Human Rights and Peoples’ Rights on the Rights of Women in Africa (Maputo Protocol) (adopted July 11, 2003, entered into force Nov. 25, 2005) at article 18.

ability to achieve economic independence, enhance human capital, and maintain physical and mental health and well-being.”²³⁶

Climate hazards and related environmental risks “tend to have a disproportionately negative effect on women and girls”, especially in terms of food insecurity, housing, livelihoods, and exposure to disasters.²³⁷ Structural discrimination in access to land, resources, political participation and decent work undermines their adaptive capacity and makes women and girls more likely to be harmed by mitigation measures such as land-use change, conservation, or energy projects that trigger land grabbing or displacement.²³⁸

This burden is heavier for women in less-developed States and those who are vulnerable across intersectional identities. Lack of comprehensive gender responsive disaster planning has led to the creation of facilities and early warning mechanisms that ignore the needs of diverse groups of women, such as Indigenous women, women with disabilities, elders and girls, as well as gender-diverse persons.²³⁹ Therefore, it is crucial for the Court to recognise this situation and clarify that all States’ climate policy and actions must include a gender perspective and address and prioritise solving these inequalities, advancing adequate and effective protection to women and girls, while recognising their role as actors of change and their importance role in society.

Furthermore, women, girls, and gender-diverse persons face a higher risk of gender-based violence during and following disasters.²⁴⁰ As the UN Special Rapporteur on trafficking in persons concluded, especially women and children face increased risks of gender-based violence and trafficking in the context of disasters, migration, and displacement.²⁴¹

Several UN treaty bodies, including the Committee on the Elimination of Discrimination against Women, have observed that the climate emergency exacerbates discrimination and pre-existing inequalities, including those experienced by women and girls.²⁴² The UN Committee on the Elimination of Discrimination against Women has observed that women are “particularly affected by environmental disasters, serious and infectious diseases and various forms of violence against women.”²⁴³ In recognizing the right to a clean, healthy and sustainable environment, the UN

²³⁶ IPCC, *Climate Change 2022: Mitigation of Climate Change. Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC 2022) at 525.

²³⁷ *Morgera Scene-Setting Report*, U.N. Doc. A/HRC/56/46 at paras. 19, 47-48, 71.

²³⁸ *Id.* at paras 19-20, 32-24, 59-60.

²³⁹ IPCC, *Climate Change 2022: Mitigation of Climate Change* page 526.

²⁴⁰ *Morgera Scene-Setting Report*, U.N. Doc. A/HRC/56/46 at para. 5.

²⁴¹ *Gender Dimensions of Trafficking Report*, U.N. Doc. A/77/170.

²⁴² Committee on the Elimination of Discrimination against Women and others, *Joint Statement on Human Rights and Climate Change* (Sept. 16, 2019).

²⁴³ Committee in the Elimination of Discrimination against Women, *General Recommendation No. 37 (2018) on gender-related dimensions of disaster risk reduction in the context of climate change* U.N. Doc. CEDAW/C/GC/37 (Feb. 7, 2018).

Human Rights Council called on States to adopt policies addressing gender equality.²⁴⁴ Likewise, the Paris Agreement preamble calls on State parties to specifically consider gender equality and women’s empowerment.

Considering existent discrimination and situation of marginalisation, States have particular obligations to protect, respect and fulfil the rights of women, girls and gender-diverse persons in the context of the climate emergency. In line with the principle of equality and non-discrimination, States should proactively ensure that women, girls and gender-diverse persons are active participants in environmental decision-making.²⁴⁵ In planning for climate change disaster prevention and action, care should be taken not to categorize women passively into “vulnerable groups,”²⁴⁶ but to enhance their full and effective participation in disaster prevention. Women are right holders and agents of change. As has been shown over and over again, when women have democratic and economic equity, their votes have tended to support sustainable environmental goals and more sustainable policies; therefore climate policies, are strengthened by the inclusion of women.²⁴⁷

States should identify the particular climate situation of vulnerabilities of women, girls and gender-diverse persons within their jurisdictions, applying an intersectional lens to identify compounding vulnerabilities (such as those of Indigenous women, older women, and women with disabilities).

As part of their duties of cooperation, States should work together to ensure that climate financing reflects gender-responsive budgeting, that women-led projects are adequately financed, and that women’s rights and livelihoods are taken into account when selecting projects for funding.²⁴⁸ State mitigation and adaptation policies should be monitored and evaluated through a gender-based lens and incorporate gender risk analysis.²⁴⁹

Indigenous Peoples have been fundamental to protect the environment, fragile ecosystems and the climate system, particularly in relation to forests, wetlands and coastal areas. Their ancestral knowledge has helped them to understand climate impacts and as much as possible, adapt to these changes. While Indigenous Peoples are suffering more from climate impacts, it also has been recognized even by the IPCC, that Indigenous and ancestral knowledge is fundamental to advance pending solutions for climate change.²⁵⁰ Therefore, recognizing and respecting Indigenous Peoples’ rights must be a priority for all States and private actors, as their inclusion in climate

²⁴⁴ UN Human Rights Council, *Resolution 48/13*, U.N. Doc. A/HRC/RES/48/13 (Oct. 18, 2021).

²⁴⁵ *Framework Principles Report*, U.N. Doc. A/HRC/37/59 at para. 26 (Principle 9).

²⁴⁶ Committee in the Elimination of Discrimination against Women, *General Recommendation No. 37 (2018)*, at para. 7.

²⁴⁷ IPCC, *Climate Change 2022: Mitigation of Climate Change* at page 527.

²⁴⁸ *Id.* at paras. 71-72.

²⁴⁹ *Id.* at para. 80.

²⁵⁰ AR6 Synthesis Report, *Summary for Policymakers*.

action efforts, including mitigation, adaptation, and loss and damage actions. When referring to the rights of Indigenous Peoples, these include their rights to land and territories, including in coastal areas and access and use of the ocean, the recognition of their customary rights, free, prior and informed consent, cultural rights, self-determination, among others,²⁵¹ that must be guaranteed also considering Indigenous women and girls, and children and youth. In the *Ogiek* case, this Court confirmed that Indigenous Peoples are “peoples” protected by African Charter rights.

As the Inter-American Court has observed, Indigenous Peoples’ “right to collective ownership is linked to the protection of, and access to, the resources to be found in their territories, because those natural resources are necessary to the very survival, development and continuity of their way of life.”²⁵² The obligation of free, prior and informed consent must be exercised in good faith. Consultation must take place “at the early stages of a development or investment plan, not only when the need arises to obtain approval from the community, if such is the case.”²⁵³ Examples include large-scale renewable energy projects,²⁵⁴ and carbon credit or carbon offset projects that may involve potential restrictions on traditional Indigenous activities in protected forests.

Indigenous Peoples are particularly vulnerable where processes of colonization have deprived them of ownership of their traditional territories, targeted these lands for extractive industries, and failed to provide adequate investment in adaptation.

Peasants is a term used in international law to refer to any person who “engages or who seeks to engage alone, or in association with others or as a community, in small-scale agricultural production for subsistence and/or for the market, and who relies significantly ... on family or household labour and other non-monetized ways of organizing labour, and who has a special dependency on and attachment to land”.²⁵⁵ The UN Declaration on the Rights of Peasants affirms that States must take “appropriate measures to ensure that peasants and other people working in rural areas” can realise their right to a healthy environment, and their rights to be engaged in the design and implementation of climate mitigation and adaptation policies.²⁵⁶ The UN Secretary-General has observed that peasants are both particularly vulnerable to the impacts of climate

²⁵¹ United Nations Declaration on the Rights of Indigenous Peoples, UNGA Res. 61/295 (adopted Sept. 13, 2007) articles 10, 11, 19, 28, 29; ILO Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries 1650 UNTS 383 (adopted June 27, 1989, entered into force Sept. 5, 1991) article 16.

²⁵² *IACtHR Advisory Opinion No. 23/17*, citing *Indigenous Community Yakye Axa v Paraguay* Series C No 125 (IACtHR, June 17, 2005) at para. 137; *Indigenous Community Sawhoyamaya v Paraguay*, Series C. No. 146 (IACtHR, Mar. 29, 2006) paras. 121-22; *Kaliña and Lokono Peoples v Suriname* Series C. No. 209 (IACtHR, Nov. 25, 2015) at para. 173.

²⁵³ *Id.*

²⁵⁴ *Statnett SF v. Fosen Vind DA*, Judgment of the Supreme Court of Norway, HR-2021-1975-S (Oct. 11, 2021).

²⁵⁵ UNGA Res 73/165 ‘United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas’ (17 December 2018) UN Doc A/RES/73/165 at Article 1.

²⁵⁶ UNGA Res 73/165 at Article 18.

change, and play a vital role in protecting carbon sinks (such as forests) from degradation.²⁵⁷ The UN Working Group on the rights of peasants and other people working in rural areas described violations of peasants rights linked to climate change, recommending that national mitigation and adaptation plans integrate rights of peasants, ensuring direct climate finance as well.²⁵⁸

Pastoralists also face increasing pressures from climate change and environmental degradation, which threaten their livelihoods and rangelands. Sustainable rangeland management, through conservation, restoration, and support for pastoralist practices, is essential to enhance ecosystem resilience, biodiversity, and climate adaptation while safeguarding pastoralist communities.²⁵⁹

Globally, around 492 million people depend at least partially on **small-scale fishing**.²⁶⁰ The right to a clean, healthy and sustainable environment is essential for fisherpeoples. It protects their historical connection with coastal landscapes and seas, which are foundational to their identity and existence, including their livelihood, culture, education, and transportation. It closely interrelates to fisher communities' right to food.²⁶¹ Yet rising sea levels and ocean acidification make fisherfolk particularly vulnerable to the effects of climate change. States have an obligation to protect vulnerable coastal and fisher communities against the impacts of climate change.

Older persons are uniquely vulnerable to climate-related harms.²⁶² In the *Verein KlimaSeniorinnen Schweiz v Switzerland*, the European Court of Human Rights pointed out that increased temperatures and heat waves put older adults at extremely high risk of morbidity and mortality.²⁶³ The European Court consequently found that States owe special obligations to protect older persons' rights in the context of climate change, and that in some cases, older persons (or their representative organisations) have the right to bring claims challenging States' failures to

²⁵⁷ *Report of the Secretary General: The impacts of climate change on the human rights of people in vulnerable situations*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/50/57 (May 6, 2022) at para. 10 [*Secretary General's Report*].

²⁵⁸ UN Working Group on the rights of peasants and other people working in rural areas, *Rights of peasants and other people working in rural areas*, Report to the UN Human Rights Council, U.N. Doc. A/HRC/60/33 (25 August 2025), at para. 61-71, 106.

²⁵⁹ *The Global Land Outlook Thematic Report on Rangelands and Pastoralists* (2024) pages 7, 10, 12 [*United Nations Convention to Combat Desertification (UNCCD)*].

²⁶⁰ *Ocean Report*, U.N. Doc. A/HRC/58/59, at paras. 22-23.

²⁶¹ *Id.* at paras. 20-21.

²⁶² Claudia Malher, (independent expert on the enjoyment of all human rights by older persons), *Human rights of older persons in the context of climate change-induced disasters*, Report to the UN General Assembly, U.N. Doc. A/78/226 (25 July 2023).

²⁶³ *Verein Klimaseniorinnen Schweiz v. Switzerland* [2024] ECtHR 304 at paras. 66-74.

protect them.²⁶⁴ This Court should draw on extensive evidence and the European Court’s findings in recognising older persons as deserving of particular protection.

Persons with disabilities are also particularly vulnerable to climate-related disasters. As the UN Secretary-General has observed, they suffer from “disproportionately higher rights of morbidity and mortality in emergencies, and face challenges in accessing emergency support”.²⁶⁵ Furthermore, persons with disabilities are more likely to live in conditions of poverty,²⁶⁶ who are in turn more likely to experience the worst effects of climate change. Persons living with disabilities are therefore vulnerable to climate change through intersecting disadvantages. States owe particular obligations to respect, protect and fulfil their rights in the context of climate change.

People in poverty situations experience a double injustice: as people who contributed the least to greenhouse gas emissions, yet also those most exposed to disasters, reduced productivity, and long-term setbacks in health, education, and livelihoods. States are currently failing to discharge their duty to protect the rights of persons living in poverty from the impacts of climate change. It is insufficient for States to protect such persons only through ad hoc schemes. Effective rights protection requires a systematic re-examination of social support, economic systems, and financial flows.²⁶⁷

4. Responsibilities of African States regarding violations by third parties operating within their jurisdiction (question (h) in the Advisory Opinion Request)

a. Regulate, monitor and control private actors

States have the obligation to respect, protect, and fulfil human rights. It is not enough to refrain from violating individuals’ and peoples’ rights. Derived from the obligation to prevent harm, States must also proactively regulate to ensure that these rights are not violated by the actions of others. This includes the activities of private actors, including multinational corporations active and operating in the territories of African States. The obligation is not fulfilled by only regulating such activities of private actors, States must also enforce regulations, monitor compliance, and sanction noncompliant behaviour.

²⁶⁴ *Id.* at paras. 519-531.

²⁶⁵ *Secretary-General’s Report*, U.N. Doc. A/HRC/50/57 at para. 14.

²⁶⁶ *Id.* at para. 14.

²⁶⁷ Olivier de Schutter (special rapporteur on extreme poverty and human rights), *Weathering the storm: poverty, climate change and social protection*, U.N. Doc. A/HRC/59/51 (April 24, 2025) at paras. 8-14, 15-18, 50-58.

The ICJ, this Court, and the Inter-American Court of Human Rights, have recognised that States must act with stringent due diligence, requiring States to regulate, monitor, and control private actors as part of their climate-related and environmental human rights obligations.²⁶⁸

The ICJ expressly clarified that in light of human rights obligations and international law, measures to protect human rights may include “the adoption of standards and legislation, and the regulation of the activities of private actors.”²⁶⁹ Adding that the “obligation of due diligence is particularly relevant in a situation in which the activities in question are mostly carried out by private persons or entities.”²⁷⁰ The ICJ concluded that States have the obligation to regulate activities of private actors with due diligence. A State might commit an internationally wrongful act “by not taking the necessary regulatory and legislative measures to limit the quantity of emissions caused by private actors under its jurisdiction”.²⁷¹ Due diligence includes strict compliance with environmental licensing conditions, such as emission limits, continuous monitoring obligations, periodic reporting and the adoption of effective pollution control measures.

The ICJ also confirmed that enforcement and monitoring mechanisms are indispensable to ensuring that public and private operators within a State’s jurisdiction comply with regulatory standards.²⁷² States who pursue fossil fuel production or consumption, and the granting of licenses or subsidies, may be held responsible under international law.²⁷³ Private actors, including private security forces, must not be allowed to intimidate or harass environmental defenders.

In *LIDHO v Cote d’Ivoire*, in the context of toxic pollution this Court recalled:²⁷⁴

... that States parties must take appropriate measures to protect persons against deprivation of life by other States, international organizations and foreign companies operating on their territory or in other areas under their jurisdiction. They must also take legislative or other measures to ensure that any activity taking place in all or part of their territory or in other locations under their jurisdiction must be compatible with Article 4 of the Charter. Such an obligation applies to all acts having direct and reasonably foreseeable impact on the right to life of persons outside their territory, including activities carried out by companies based in their territory or under their jurisdiction.

The obligation to regulate must consider the level of risk posed by activities, as it was mentioned before. Thus, States must regulate without exception those activities that could cause significant

²⁶⁸ IACtHR Advisory Opinion No. 23/17 ; IACtHR Advisory Opinion No. 32/25.

²⁶⁹ ICJ Advisory Opinion at para. 403.

²⁷⁰ *Id.* at para. 252, citing ITLOS Advisory Opinion No. 31.

²⁷¹ *Id.* at para. 428.

²⁷² *Clean Air Report*, U.N. Doc. A/HRC/61/47 at 43.

²⁷³ ICJ Advisory Opinion at paras. 282 and 427.

²⁷⁴ *LIDHO v. Cote d’Ivoire*.

environmental harm threatening the rights to life and to personal integrity, among other human rights.²⁷⁵ Regarding climate change, States' regulation of greenhouse gas-emitting activities should be aligned toward the global temperature limit of no more than 1.5°C above pre-industrial levels. States should set national-level plans and policies oriented toward this limit, and regulate private actors' specific activities.

In this regard, the IACtHR has reiterated that States have a duty to prevent negative consequences from business activities that might impact human rights. To that end, States must use all means at their disposal to prevent activities under their jurisdiction from causing significant harm to the environment.²⁷⁶ This include making sure that businesses have adequate policies to protect human rights; request adequate due diligence processes including effective identification prevention and correction of violations and make sure these are implemented; and establishing reparation processes that are simple and quick.²⁷⁷

The Inter-American Court of Human Rights has also reiterated that businesses must respect human rights in their operations and take immediate, effective measures to prevent and mitigate risks that their activities cause.²⁷⁸ To that end, States must require companies to carry out due diligence processes in relation to human rights and the environment. Additionally, the IACtHR, in the context of the climate emergency, considers that States must establish differentiated obligations based on the actual and historical contribution of businesses to climate change, and therefore, impose stricter duties to high-emitting companies, including holding parent companies liable.²⁷⁹ Businesses and other private actors must immediately respond with effective and proportional measures to mitigate the risks that their activities cause.²⁸⁰

When the protection of the environment might conflict with other rights, including private property, the public interest must prevail and some restrictions on private property may be necessary (in line with the principle of proportionality).²⁸¹

The duties already identified in this submission also relate to the activities of private actors. States must regulate, control, monitor, and enforce policies to transition away from fossil fuels, including legislative, judicial and administrative measures preventing violations, enforcement measures for responding to non-compliance, and remediation mechanisms. States' failures to fulfil these obligations may amount to human rights violations.²⁸² According to the European Court of Human

²⁷⁵ IACtHR Advisory Opinion No. 23/17, para. 149.

²⁷⁶ *La Oroya v. Peru*, 126.

²⁷⁷ *La Oroya v. Peru*, para. 112.

²⁷⁸ *La Oroya v. Peru* at para. 114.

²⁷⁹ IACtHR Advisory Opinion No. 32/25 at para. 350.

²⁸⁰ *La Oroya v. Peru*, para. 114.

²⁸¹ IACtHR *Case of Salvador Chiriboga v. Ecuador*, para. 76.

²⁸² African Charter on Human and Peoples' Rights, article 24; *Verein Klimaseniorinnen Schweiz and others v. Switzerland* (ECtHR 2024) *SERAC v Nigeria* (AfCommHPR) at para. 52.

Rights, measures must provide effective deterrence against threats to the right to life (and other human rights), and be timely, appropriate, and consistent.²⁸³

Moreover, under the UN Guiding Principles on Business and Human Rights, businesses must avoid causing or contributing to harm (principle 13), conduct ongoing human rights due diligence (principles 17-21), and provide remediation when violations have occurred (principle 22). This framework applies directly to air quality, given the significant health and environmental harm linked to business activities.

In addition, States must regulate, control and monitor private economic activities that harm the marine environment, including by adopting and enforcing robust laws, permits, operational standards, inspections, and sanctions in sectors such as industrial fishing, shipping, and offshore oil and gas.²⁸⁴ States must base these rules on the best available science incorporating Indigenous and traditional knowledge, carry out prior environmental and human rights impact assessments for public and private projects that may significantly affect the ocean or coastal communities, and apply the precautionary principle so that risky activities (such as deep-sea mining) are not authorized unless there is strong scientific certainty that there will be no harm and strong protections are in place.²⁸⁵

States must also ensure that private actors respect rights to information, participation, and remedies, including by making corporate data accessible, guaranteeing access to justice and effective reparation for business-related rights abuses, and creating independent oversight and grievance mechanisms that can investigate and redress corporate misconduct, including related to transboundary harm.²⁸⁶ Legislative measures ensuring participation must require businesses and all private actors engaging in activities relevant to the causes and impacts of climate change the production and disclosure, in a clear, comprehensive, timely and free manner, of all information related to such activities.²⁸⁷

The activities of private actors must also be regulated even when they relate to a just transition. Multinational corporations involved in the mining of copper, lithium, and other minerals used as part of the development of renewable energy must abide by human rights standards. Private actors must be regulated to respect the rights of workers and local communities.

²⁸³ *Cannavacciuolo and others v. Italy* (ECtHR 2019) at paras. 380 and 381.

²⁸⁴ *Ocean Report*, U.N. Doc. A/HRC/58/59 at paras. 70-77, 86-88, 100(d), 100(g), 100(h).

²⁸⁵ *Id.* at paras. 69, 75-80, and 100(b)-(c).

²⁸⁶ *Id.* at paras. 38, 76-77, 81, 82-825, 93, 100(l)).

²⁸⁷ *IACtHR Advisory Opinion No. 32/25* at para. 516.

b. Obligation to undertake environmental, social, and human rights impact assessments (ESHRIAs)

As discussed above, the preventive principle sits at the core of international law treaty and customary law concerning environmental harms. States have an obligation to undertake environmental, impact assessments, an obligation recognised as customary international law and human rights law. In addition, environmental impact assessments must not only be a technical evaluation, these processes must also consider social and human rights impacts. This was explained in my report presented at the UN General Assembly, with a framework for environmental, social and human rights impact assessments (ESHRIAs).²⁸⁸

A comprehensive and integrated approach enables government decision-making and adequate risk management before a project or activity starts. It also applies for ongoing projects where regulations were not in place before work started, or when a significant expansion and modification of activities and projects occur. Environmental, social and human rights impact assessments must proactively assess whether, and under what conditions, the proposed activity or project – which poses a risk of significant harm to the environment, the climate, biodiversity or human rights – should receive government approval.²⁸⁹

States have an obligation to regulate, oversee and enforce ESHRIA processes that apply to private entities posing risks of serious harm or human rights impacts.²⁹⁰ States must enact and periodically strengthen clear, non-regressive legal frameworks that require comprehensive, integrated impact assessments for high-risk sectors (including fossil fuels, industrial agriculture and fisheries, mining and major infrastructure and energy projects), avoid broad sectoral exemptions based on “national interest” or similar justifications, and ensure that assessments are carried out by independent, multidisciplinary experts rather than project proponents.²⁹¹

States must control and monitor private actors through licensing, mandatory disclosure, independent review, inspections, administrative and criminal penalties, and retain the power to modify, suspend or revoke project approvals where monitoring reveals non-compliance or escalating risks.²⁹² State duties interact with corporate responsibilities: States should require companies and financial institutions to integrate impact assessment findings into their human rights and environmental due diligence laws, maintain grievance mechanisms, and provide or cooperate in remediation for business-related harms.²⁹³

²⁸⁸ *ESHRIA Report*, U.N. Doc. A/80/187.

²⁸⁹ *ESHRIA Report*, U.N. Doc. A/80/187 at para. 5.

²⁹⁰ *Id.* at paras. 27-29, 31-33.

²⁹¹ *Id.* at paras. 33-40, 35-38, 88(b), 88(c), 88(e).

²⁹² *Id.* at paras. 28, 33-34, 61-69, 70-79, 88(a), 88(f), 88(g)).

²⁹³ *Id.* at paras. 86-87, 90.

Adequate impact assessments and ESHRIAs are particularly important for projects with the potential to emit large volumes of greenhouse gases. Such projects not only contribute to global warming, but also to localised pollution, environmental degradation and human health impacts. Prolonged inaction or weak enforcement may amount to a human rights violation.²⁹⁴ States must adopt and regularly strengthen legal and policy frameworks that set health-based air quality and emissions standards for businesses; require ESHRIAs to assess health impacts before licensing major polluting activities; and ensure that industrial and other operators are subject to continuous emissions, monitoring, inspections, and, where necessary, shutdowns, with the costs of oversight and enforcement charged to polluters and fines structured as genuine economic disincentives.²⁹⁵

States must also require companies—especially large or high-emitting ones—to carry out human rights and environmental due diligence on air pollution risks (including strict compliance with permits, monitoring, reporting and pollution control measures), to bear differentiated and greater burdens where they contribute the most to air pollution, and to provide or cooperate in remediation or just transition measures.²⁹⁶

States have a stringent due diligence obligation to integrate climate change into ESHRIAs for any activity posing significant climate risk, especially in high-emitting sectors. Concretely, States must regulate to ensure that ESHRIAs: (i) quantify full greenhouse gas emissions (Scopes 1, 2 and 3) and test compatibility with emissions reductions pathways consistent with no more than 1.5°C of global heating; (ii) assess impacts on carbon sinks (forests, soils, inland waters, coastal “blue-carbon” ecosystems, and the ocean); (iii) evaluate effects on the resilience and adaptive capacity of human and natural systems, with an intersectional lens; and (iv) consider project viability under projected climate impacts, applying the best available science, precaution, equality/non-discrimination, and intergenerational equity. States should refuse approval for projects that pose severe or irreversible risks to the climate system—particularly new fossil fuel developments—and impose differentiated, stricter obligations on major historical and current emitters, and on high-emitting industries.²⁹⁷

A growing number of courts and tribunals across the world have also identified States’ obligations to undertake environmental impact assessments, stressing that these must consider indirect upstream and downstream greenhouse gas emissions on a cumulative basis. I have identified

²⁹⁴ *Id.* at paras. 83-85.

²⁹⁵ *Id.* at paras. 42-48, 66-71, 86(e) and 86(f).

²⁹⁶ *Id.* at paras. 49-57, 86, 88.

²⁹⁷ *ESHRIA Report*, U.N. Doc. A/80/187 at Annex 1.

decisions in South Africa,²⁹⁸ the Netherlands,²⁹⁹ Norway,³⁰⁰ the United Kingdom,³⁰¹ the Inter-American Court of Human Rights,³⁰² and the Court of Justice of the European Free Trade Association.³⁰³ A similar conclusion was recently reached by the European Court of Human Rights.³⁰⁴

Domestic African courts have also stringently applied and interpreted this obligation in the context of fossil fuel extraction and combustion. Two cases illustrate this stringency. In *Earthlife Africa Johannesburg v Minister for Environmental Affairs*, the North Gauteng High Court in South Africa set aside a decision by a government minister which would have authorised the establishment of a new coal-fired power station.³⁰⁵ The Court found that the Minister had failed to properly assess the climate-related consequences of the plant. Even though South Africa’s legislative framework for environmental review did not expressly impose an obligation on the minister to consider climate impacts, the Court found that such consideration was demanded by the Act’s purpose,³⁰⁶ by South Africa’s international law obligations,³⁰⁷ and by the right to healthy environment protected under South Africa’s Constitution.³⁰⁸ In *Save Lamu v National Environmental Management Authority*, the Environment and Land Court of Kenya upheld a lower court decision setting aside an environmental impact assessment performed for a coal-fired power plant on the basis that its process did not incorporate effective mechanisms for public participation.³⁰⁹ The Court found that these failures violated the environmental rights guaranteed by Kenya’s Constitution.

Several courts and tribunals have directly considered how ESHRIAs can be made effective in the context of climate change. The ICJ, for its part, has found that climate impact assessments can be integrated into more general ESHRIA frameworks, but must assess climate impacts even at the “level of proposed individual activities” (such as power plants or fossil fuel extraction), and “for the purpose of assessing their possible downstream effects”.³¹⁰ In other words, it is not enough to

²⁹⁸ *Earthlife Alliance* (ZASCA 2025).

²⁹⁹ *Mileudefensie v Royal Dutch Shell* ECLI:NL:RBDHA:2021:5339 (District Court of The Hague, Netherlands, May 26, 2021).

³⁰⁰ HR-2020-2472-P, *Greenpeace Nordic and Nature and Youth v Ministry of Petroleum and Energy* (Norwegian Supreme Court, 22 December 2020).

³⁰¹ *Finch v Surrey County Council* [2024] UKSC 20.

³⁰² *IACtHR Advisory Opinion No. 32/25* at para. 359.

³⁰³ *Case E-18/24 Föreningen Greenpeace Norden and Natur og Ungdom v State of Norway (EFTA Ct, Advisory Opinion, 21 May 2025)*.

³⁰⁴ *Greenpeace Nordic* (ECtHR 2025).

³⁰⁵ Case No 65662/16 (High Court of South Africa Gauteng Division, 8 March 2017).

³⁰⁶ *Id.* at para. 91.

³⁰⁷ *Id.* at para. 83.

³⁰⁸ *Id.* at para. 82.

³⁰⁹ *Save Lamu v National Environmental Management Authority* (Tribunal Appeal No. NET 196 of 2016, 16 October 2025).

³¹⁰ *ICJ Advisory Opinion* at para. 298.

simply consider the most direct climate impacts of a proposed activity. Instead, “downstream” impacts, such as the combustion of fossil fuels following their extraction, are relevant to assessing the impact of a project. This is true even if that combustion occurs in a different country, or at a different time.

The ITLOS has likewise considered this obligation in the context of the marine environment. It clarified that climate impacts must be assessed prior to the implementation of a planned project, including the activities of private companies.³¹¹ This includes all projects within the territorial scope of a State that may cause substantial pollution, including climate-related pollution.³¹² The Tribunal emphasised that this should be interpreted broadly.³¹³ The Tribunal recognised EIAs must consider not just the individual effects of a particular project, but also their cumulative effects together with other planned activities: “planned activities may not be environmentally significant if taken in isolation, whereas they may produce significant effects if evaluated in interaction with others”.³¹⁴

States must design ESHRIA processes to avoid conflicts of interest (especially when regulating private entities), avoid pro forma “check the box” approaches, and consider the entire scope of a project, rather than fragmenting it into several smaller, unconnected projects. Sectors—including the energy sector—must not be arbitrarily excluded from ESHRIA processes. Summarising international human rights standards, all ESHRIAs must:³¹⁵

- a. Be undertaken as early as possible and prior to any proposal authorisation or the commencement of any activity, or when significant modification and/or expansion is proposed;
- b. Assess proposals’ direct, indirect, domestic, transboundary, adverse, positive, cumulative, comprehensive, long-term, short-term, climate, biodiversity, environmental, health, cultural, social and human rights impacts, alongside proposals’ compatibility with the State’s international legal obligations and policies;
- c. Follow precautionary, prevention, proportionality, best-available science, maximum disclosure and equity and non-discrimination principles;
- d. Be prepared by independent, qualified experts;
- e. Ensure understandable, accessible, timely and complete information relevant to the proposal and assessment process;

³¹¹ *ITLOS Advisory Opinion No. 31* at para. 358.

³¹² *Id.* at para. 359.

³¹³ *Id.* at para. 360.

³¹⁴ *Id.* at para. 365.

³¹⁵ *Id.* at para. 32.

- f. Provide effective, meaningful, open and inclusive public participation throughout each stage of the assessment process, including the monitoring of approved projects according to the terms and conditions of approval;
- g. Ensure access to justice and effective remedies, including for violations of assessment procedures and foreseeable human rights violations;
- h. Ensure special measures for the protection of the rights of marginalised people and groups.

In summary, human rights standards demand that climate impacts be considered in ESHRIA decisions. ESHRIAs must comply with human rights standards concerning the right to a healthy environment. This includes the right to public participation, interpreted broadly. ESHRIAs should apply to both government activities, and the activities of private parties. ESHRIAs should consider both the downstream and cumulative impacts of proposed projects that are likely to cause climate-related harms. Categorically, this includes all fossil fuel-related projects.

c. Enforcement

It is not enough to regulate and monitor the activity of private actors, and require robust impact assessment: States must also enforce regulations against private actors who violate their obligations under domestic and international law.

Enforcement should be based on the polluter pays principle. Private actors who cause harm through their polluting activities—including pollution related to greenhouse gases—should bear the cost of remediating that pollution. This can include administrative fines, civil suits, and, in appropriate circumstances, criminal prosecutions.

Conversely, States should be cautious of contractual or international legal mechanisms which might undermine their ability to regulate private actors. Specifically, States should not enter into investor-state dispute resolution agreements that would undermine their ability to effectively regulate corporations without the risk of significant financial penalties. Where States do enter into such agreements, they should be negotiated with full transparency and public participation, and contain robust public interest and environmental provisions to protect States' capacities to regulate for protection of the environment.³¹⁶

States must not violate human rights under the pretext of securing private international investment, and must not permit private security forces to operate with impunity. This has been brought to the attention of States: for example, a recent communication sent by 14 UN experts highlighting the importance of these obligations in the context of the East African Crude Oil Pipeline (EACOP),

³¹⁶ David Boyd (special rapporteur on the right to a healthy environment), *Paying polluters: the catastrophic consequences of investor-State dispute settlement for climate and environment action and human rights*, Report to the UN General Assembly U.N. Doc. A/78/168 (July 13, 2023) at paras. 61-63, 75.

expressed serious concerns about the project, and human rights violations carried out by both public and private actors.³¹⁷

C. Conclusion

As the UN Special Rapporteur on the human right to a clean, healthy and sustainable environment, I reiterate my gratitude to the Court for the opportunity and the honour to intervene in this important process and to contribute with my expertise to the analysis of this historic request for an Advisory Opinion.

As described in this intervention, the main State obligations under international law and human rights law in relation to climate change have been clarified, and this Court as well as the African Commission have rendered pioneer and vital decisions establishing such duties. Today, the African Court has a historic opportunity to contribute with the needed clarification in the region regarding the specific obligations and priorities that States must fulfil. It is a contribution that is significantly required yet currently missing from the growing development of human rights obligations in the context of climate change, especially considering that the region and the world is facing a climate emergency. Therefore, making sure that States understand and more importantly, comply with their international law and human rights law obligations is fundamental, for present and future generations, for humanity's wellbeing and survival. In drafting Article 24, African States led the way on the development of the right to a healthy environment, including its expressly collective dimensions. Clarifying those dimensions in the context of climate change will be a lasting contribution of this Court.

Signed and dated on this 30 March 2026,

Respectfully,

A handwritten signature in black ink, reading "Astrid Puentes R.", with a stylized flourish at the end.

Astrid Puentes Riaño

Special Rapporteur on the human right to a clean, healthy and sustainable environment

³¹⁷ *EACOP Letter* Ref AL TZA 3/2025.