Criminalization of crimes that affect the environment

Background paper prepared by the Secretariat

I. Introduction

1. Crimes that affect the environment are often serious, transnational organized crimes with far-reaching impacts for the rule of law, governance, national security and human health. They entail significant adverse impacts, including habitat loss, environmental damage, pollution and climate change.\(^1\) They deprive communities of essential resources and jeopardize their livelihoods.\(^2\) The harms caused by crimes that affect the environment not only foster underdevelopment but also pose the potential for armed violence,\(^3\) ultimately undermining the achievement of the 2030 Agenda for Sustainable Development.\(^4\) These harms extend beyond national borders and persist across generations.

2. The international community has recognized the worrying scale and scope of crimes that affect the environment and the need for global action to prevent and address such crimes.\(^5\) The General Assembly has expressed alarm at existing research indicating that crimes that affect the environment have become some of the most lucrative transnational criminal activities and are often closely interlinked with different forms of crime and corruption and that money-laundering and the illicit

---


\(^5\) See resolutions of the General Assembly cited in the report of the Secretary-General, A/77/132 (7 July 2022), para. 2.
financial flows derived from them may contribute to the financing of other transnational organized crimes and terrorism.6

3. Effectively addressing these crimes requires “strengthening legislation, international cooperation, capacity-building, criminal justice responses and law enforcement efforts aimed at, inter alia, dealing with organized crime, corruption and money-laundering linked to such crimes, and illicit financial flows derived from such crimes, while acknowledging the need to deprive criminals of proceeds of crime”. 7

4. The need to effectively prevent and combat these crimes has been recognized in different international forums and has been the focus of resolutions adopted by the General Assembly,8 the United Nations Congress on Crime Prevention and Criminal Justice,9 the Economic and Social Council and its Commission on Crime Prevention and Criminal Justice, as well as other treaty-based intergovernmental bodies, such as the Conference of the Parties to the United Nations Convention against Transnational Organized Crime (Organized Crime Convention)10 and the Conference of the States Parties to the United Nations Convention against Corruption.11

5. Resolutions of the Conference of the Parties to the United Nations Convention against Transnational Organized Crime have called upon States to harness the potential of the Organized Crime Convention in addressing the complex and evolving challenges posed by transnational organized crime. Resolution 10/6 of the Conference of the Parties to the Organized Crime Convention recognized the adverse consequences of crimes that affect the environment on economic development, public health, human safety, food security, livelihoods and habitats.12 It affirmed that the Organized Crime Convention constitutes an effective tool and an essential part of the legal framework for preventing and combating transnational organized crimes that affect the environment and for strengthening international cooperation in this regard.13 It urged States parties to implement the Convention, in accordance with fundamental principles of their domestic law, in order to effectively prevent, investigate, prosecute and punish crimes that affect the environment falling within the scope of the Convention, as well as related offences established under the Convention.14 It further called upon States parties to make these crimes, in appropriate cases, “serious crimes, in accordance with their national legislation, as defined in article 2 (b) of the Organized Crime Convention, in order to ensure that, where the offence is transnational in nature and involves an organized criminal group, effective international cooperation can be afforded under the Convention”.15

6. Resolution 11/3 of the Conference of the Parties to the Organized Crime Convention further reaffirmed that the Organized Crime Convention “as a global instrument with wide adherence, offers a broad scope for cooperation to address existing and emerging forms of transnational organized crime, including crimes that affect the environment falling within the scope of the Convention”16 and again encouraged States parties to consider making crimes that affect the environment, in appropriate cases, serious crimes, in accordance with their national legislation, as

---

6 General Assembly resolution 76/185 (16 December 2021), preamble.
7 General Assembly resolution 76/185 (16 December 2021), para. 1; Kyoto Declaration on Advancing Crime Prevention, Criminal Justice and the Rule of Law: Towards the Achievement of the 2030 Agenda for Sustainable Development, A/CONF.234/16 (New York, 2021), para. 87.
8 See, for example, A/RES/69/314; A/RES/71/326; A/RES/73/343; A/RES/75/311; and A/RES/77/325.
10 Conference of the Parties to the Organized Crime Convention resolutions 10/6 and 11/3.
12 Conference of the Parties to the Organized Crime Convention resolution 10/6, preamble.
13 Ibid., para. 1.
14 Ibid., para. 3.
15 Ibid., para. 4.
16 Conference of the Parties to the Organized Crime Convention resolution 11/3, preamble.
defined in article 2, paragraph (b), of the Organized Crime Convention in order to facilitate international cooperation.\textsuperscript{17}

7. At the same time, other treaties, including notably multilateral environmental agreements (MEAs), are also relevant to developing and implementing criminal justice responses to crimes that affect the environment at international, regional and national levels. In this context, criminal justice and criminal law responses should be seen as one component of a broader legal framework for responding to these issues, which also includes international environmental law. The development and implementation of international, regional and national criminal justice responses to crimes that affect the environment, including the development of legal instruments, policies and strategies, needs to be coherent with and complementary to this broader legal framework, and vice versa.

8. The purpose of the present background paper is to support the Working Group of Government Experts on Technical Assistance in its consideration of item 2 of its provisional agenda, entitled “Criminalization of crimes that affect the environment”, by providing a brief, non-comprehensive overview of international treaties with a global scope that concern the environment, especially MEAs, that may be relevant to development and implementation of criminal justice responses to crimes that affect the environment. This is done with a view to supporting, as relevant, the harmonized implementation of the Organized Crime Convention, MEAs and other relevant international treaties in relation to crimes that affect the environment and, ultimately, promoting more effective responses to prevent and combat these crimes. While it must be noted that not all parties to the Organized Crime Convention are parties to each of these treaties, the majority of these instruments have a high level of adherence.

II. International legal frameworks relevant to specific crimes that affect the environment

9. The following sections of this background paper consider relevant international treaties in relation to the following forms of crimes that affect the environment:

(a) Wildlife crime;
(b) Forest crime;
(c) Crimes in the fisheries sector;
(d) Illegal mining and trafficking in metals and minerals;
(e) Waste trafficking;
(f) Pollution crime.

10. While some of these instruments make express reference to the use of criminal law or contemplate the possible use of criminal law through references to penalization, punishment, penalties and/or sanctions, most of these instruments do not expressly address criminalization of relevant conduct or criminal justice measures relating to the detection, investigation, prosecution and adjudication of crimes that affect the environment.

A. Wildlife crime

11. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is the primary global treaty governing the international trade in wild animals and plants. Recognizing the need to protect wild fauna and flora, CITES provides for restrictions on the international trade in specimens of species listed in

\textsuperscript{17} Ibid., annex.
one of three appendices. Appendix I includes species threatened with extinction which are or may be affected by international trade. CITES provides that trade in specimens of these species must be subject to particularly strict regulation in order not to further endanger their survival and must only be authorized in exceptional circumstances. Appendix II includes specimens which although not necessarily now threatened with extinction may become so unless their trade is subject to strict regulation in order to avoid utilization incompatible with their survival. It also includes other species which must be subject to regulation in order to ensure that trade in these species may be brought under effective control. Finally, appendix III includes species identified by any Party as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation and as needing the cooperation of other Parties in the control of trade.

12. Article II, paragraph 4, of CITES provides that Parties shall not allow trade in specimens of species included in appendices I, II or III except in accordance with the Convention. Restrictions governing the export, import, re-export and introduction from the sea of specimens of species included in these appendices are set out in articles III, IV and V of the Convention respectively. Article VI governs the granting of permits and certificates pursuant to these articles. Article VIII, paragraph 1, of CITES provides that Parties shall take appropriate measures to enforce the provisions of the Convention and to prohibit trade in specimens in violation of the Convention. It further expressly provides that these shall include measures to penalize trade in, or possession of, such specimens, or both and measures to provide for the confiscation or return of such specimens.

13. Article XIV, paragraph 1, of CITES clarifies that the provisions of the Convention do not affect the right of Parties to adopt stricter domestic measures regarding the conditions for trade, taking, possession or transport of specimens of species included in the Convention’s appendices or the complete prohibition of such acts, nor does it affect the right of Parties to adopt domestic measures restricting or prohibiting trade, taking, possession or transport of species not included in the Convention’s appendices.

14. The Convention on the Conservation of Migratory Species of Wild Animals (CMS) is also relevant to wildlife crime. The CMS requires protections in relation to two categories of migratory species. Migratory species which are endangered are listed in appendix I to the CMS. Appendix II to the CMS lists migratory species “which have an unfavourable conservation status and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement”. Article III requires Parties that are Range States of a migratory species in appendix I to take, or endeavour to take, certain conservation measures. In particular, Range States are required to prohibit the taking of animals that belong to the migratory species listed in appendix I. Articles IV and V of the CMS establish a framework for the development of agreements for the conservation and management of migratory species listed in appendix II. Parties are furthermore free to adopt stricter domestic measures concerning the conservation of migratory species listed in the appendices

---

18 The substantive provisions of CITES refer to “trade” rather than “international trade”, with “trade” defined in article I, paragraph (c), as meaning “export, re-export, import and introduction from the sea”. This background paper uses the term “international trade” as a shorthand for this conception of trade.
19 CITES, art. II (1).
20 CITES, art. II (2).
21 CITES, art. II (3).
22 CMS, art. III (1).
23 CMS, art. IV (1).
24 CMS, art. III (5).
to the CMS or to adopt measures concerning the conservation of species not listed therein.\textsuperscript{25}

15. The UNODC \textit{Guide on Drafting Legislation to Combat Wildlife Crime} recommends that States draw upon international lists of wildlife such as the appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the appendices to the Convention on the Conservation of Migratory Species of Wild Animals and the International Union for Conservation of Nature and Natural Resources (IUCN) Red List\textsuperscript{26} in developing national legislative schedules for use by criminal legislation relating to wildlife crime.\textsuperscript{27}

16. Given the impacts that wildlife crime can have upon biological diversity, the Convention on Biological Diversity (CBD) is also relevant. Biological diversity is defined in the Convention as meaning “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; [including] diversity within species, between species and of ecosystems”.\textsuperscript{28} The CBD requires Contracting Parties to take certain measures concerning, inter alia, the conservation of biological diversity and the sustainable use of its components.\textsuperscript{29} These measures, such as the establishment of systems of protected areas, may also be relevant to addressing wildlife crime.

17. The General Assembly has on several occasions called upon Member States to make illicit trafficking in protected species of wild fauna and flora a serious crime, in accordance with their national legislation and as defined in article 2 (b) of the Organized Crime Convention, in order to ensure that, where an offence is transnational in nature and involves an organized criminal group, effective international cooperation can be afforded under the Convention.\textsuperscript{30} It has further called upon Member States to review and amend national legislation, as necessary and appropriate, so that offences connected to the illegal trade in wildlife are treated as predicate offences, as defined in the Organized Crime Convention, for the purposes of domestic money-laundering offences and are actionable under domestic proceeds of crime legislation, and so that assets linked to illegal trade in wildlife and wildlife products can be seized, confiscated and disposed of.\textsuperscript{31}

\textbf{B. Forest crime}

18. Forest crime is not defined under any international agreement, but may be understood to include criminal offences such as illegal logging, prohibited acts in relation to particular forest species, forest ecosystem-related offences, prohibited acts in protected areas such as indigenous lands, acts related to prohibited and regulated equipment and methods and document fraud relating to permits and other similar documents. It covers offences relating to timber and non-timber forest products (NTPFs). It includes both acts relating to illegal transboundary trade and acts which occur within national borders.

19. There are no global treaties specifically concerning forests. However, instruments such as CITES, the CBD and the UNESCO Convention for the Protection of the World Cultural and Natural Heritage (World Heritage Convention) contain provisions that may also be relevant to forest crime. The definition of “specimen” used in CITES includes any plant, whether alive or dead, as well as, for plant species

\textsuperscript{25} CMS, art. XII (3).
\textsuperscript{26} Maintained by the International Union for Conservation of Nature and Natural Resources (IUCN), available at: \url{www.iucnredlist.org/about/introduction}.
\textsuperscript{27} Wildlife Guide, p. 6.
\textsuperscript{28} CBD, art. 2.
\textsuperscript{29} See CBD, art. 8 (a).
\textsuperscript{30} A/RES/71/326, para. 5; A/RES/73/343, para. 5; A/RES/75/311, para. 6; A/RES/77/325, para. 6. See also A/RES/69/314, para. 4.
\textsuperscript{31} A/RES/71/326, para. 7; A/RES/73/343, para. 8; A/RES/75/311, para. 9; A/RES/77/325, para. 9. See also A/RES/69/314, para. 5.
included in appendix I, any readily recognizable part or derivative, and for plant species included in appendices II and III, any readily recognizable part or derivative specified in these appendices in relation to the species.

20. The World Heritage Convention recognizes the primary duty of States to ensure the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage situated on its territory. 32 To ensure that effective and active measures are taken for the protection, conservation and presentation of this cultural and natural heritage, States Parties are required to endeavour, in so far as possible, and as appropriate for each country, to take certain measures set out in article 5 of the Convention. These measures may include measures relating to protecting and conserving forests and hence may also be relevant to preventing and combating forest crime. As noted above, the CBD also contains obligations relating to the establishment of protected areas, as well as to the regulation or management of relevant processes and categories determined to have a significant adverse effect on biological diversity, which could include illegal logging and other forest crimes.33

C. Crimes in the fisheries sector

21. The fisheries sector is involved in a wide range of activities, which include taking, culturing, processing, storing, transporting, marketing and selling fish from marine, coastal or inland areas. These activities may be small-scale or part of larger industrial operations and may be undertaken for subsistence, commercial or other purposes. The fisheries sector is vulnerable to multiple forms of organized crime, including both crimes closely linked to fishing and related activities and crimes that have no direct connection with fishing or related activities, but are committed, for example, on fishing, carrier or supply vessels or in fish-processing facilities, and which use fishing and related activities as a cover for crimes such as trafficking in firearms or illicit drugs, piracy and even terrorism.34

22. Crimes that are closely related to fishing and related activities include offences relating to the fishing of particular prohibited or protected fish species, offences related to the use of particular prohibited or regulated practices or gear, offences relating to fishing in particular areas, illegal trans-shipment, document fraud relating to fishing licences or authorizations, fish fraud, illegal possession and trafficking in fish or fish products.

23. Fisheries management is regulated by several international agreements. The United Nations Convention on the Law of the Sea (UNCLOS) provides the foundation for the law of the sea and sets out a legal framework of States parties’ rights and obligations in various maritime zones, including territorial seas, archipelagic waters, continental shelves, exclusive economic zones, high seas and other areas beyond national jurisdiction.35 Under article 192 of UNCLOS, States have the obligation to protect and preserve the marine environment.

24. Under UNCLOS, the jurisdicutional rights and associated powers and responsibilities of States, in particular of coastal, archipelagic and flag States, in relation to fishing and related activities differ depending on where these activities are undertaken. Of relevance to the use of criminal law to address crimes in the fisheries sector is article 73, paragraph 3, of UNCLOS, which provides that Coastal State penalties for violations of fisheries laws and regulations in the exclusive economic

---

32 World Heritage Convention, art. 4, which refers to the definitions of cultural and natural heritage set out in arts. 1 and 2.
33 CBD, art. 8.
35 This jurisdictional framework is regarded as reflecting customary international law and so sets forth the rights and obligations of States in a general sense.
zone may not include imprisonment, in the absence of agreements to the contrary by the States concerned, or any other form of corporal punishment. Furthermore, arrested vessels and their crews shall be promptly released upon the posting of reasonable bond or other security.\textsuperscript{36}

25. Building on the provisions of UNCLOS,\textsuperscript{37} the Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (Fish Stocks Agreement) requires that States parties cooperate to strengthen existing subregional and regional fisheries management organizations and arrangements in order to improve their effectiveness in establishing and implementing international conservation and management measures.\textsuperscript{38} Where a subregional or regional fisheries management organization or arrangement exists, States parties with vessels that fish straddling or highly migratory fish stocks on the high seas are required to fulfill their duty to cooperate by becoming members of such organizations or participants in such arrangements or by agreeing to apply established international conservation and management measures.\textsuperscript{39}

26. Further important instruments relating to fisheries management concluded within the framework of the Food and Agriculture Organization of the United Nations (FAO) include the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement) and the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Agreement on Port State Measures).

27. Though not legally binding, the FAO Code of Conduct for Responsible Fisheries is based in part on relevant rules of international law, including those reflected in the United Nations Convention on the Law of the Sea, and contains provisions that are binding under the Compliance Agreement.\textsuperscript{40} The International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and the Voluntary Guidelines for Flag State Performance also address State actions and set out in detail the measures to be taken by State and non-State actors, in particular with regard to illegal, unreported and unregulated fishing.

28. Several international instruments address fisheries and the marine environment from the perspective of conservation. The Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Convention on the Conservation of Migratory Species of Wild Animals prohibit or regulate the trade of certain marine and aquatic species and provide for specific protections, and the Convention on Biological Diversity encourages States parties to establish protected areas to conserve biological diversity in marine ecosystems. These protections may apply across all maritime zones and may, in addition to prescribed measures, require compliance and enforcement of such measures through national frameworks. The UNODC publication entitled \textit{Combating Crimes in the Fisheries Sector: A Guide to Good Legislative Practices} recommends that States draw upon international lists of endangered and protected species, such as the appendices to CITES, the appendices to the CMS and the IUCN Red List in developing national legislative schedules for use in criminal legislation. Definitions of protected areas coming from the CBD and from the IUCN are also referred to guide States in defining national marine protected areas.\textsuperscript{41}


\textsuperscript{36} UNCLOS, art. 73, para. 2.
\textsuperscript{37} United Nations Convention on the Law of the Sea, arts. 63, 64 and 118. See also the sections entitled “Exclusive economic zone” and “High seas” above.
\textsuperscript{38} United Nations Fish Stocks Agreement, art. 13.
\textsuperscript{39} Ibid., art. 8 (3).
\textsuperscript{40} The provisions contained in the Code of Conduct for Responsible Fisheries should be interpreted and applied in conformity with the relevant rules of international law, as reflected in the United Nations Convention on the Law of the Sea and the United Nations Fish Stocks Agreement.
\textsuperscript{41} Guide on Crimes in the Fisheries Sector, pp. 27–28, 32–34.
of Areas beyond National Jurisdiction (BBNJ Agreement) was adopted by an intergovernmental conference convened by the General Assembly for the purposes of elaborating this instrument.\footnote{Intergovernmental Conference on an international legally binding instrument 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, convened pursuant to General Assembly resolution 72/249. For more information, see www.un.org/bbnj/} The BBNJ Agreement aims to protect, preserve, restore and maintain marine biodiversity and ecosystems with a view to enhancing their productivity and health, and to strengthen their resilience to stressors, including those relating to climate change, ocean acidification and marine pollution.\footnote{The Agreement will enter into force 120 days after the date of deposit of the sixtieth instrument of ratification, approval, acceptance or accession.} Among other things, the agreement provides a mechanism for establishing protected areas on the high seas, in areas beyond national jurisdiction.


D. Illegal mining and trafficking in metals and minerals

31. There are no international treaties directly addressing illegal mining and trafficking in metals and minerals. Several multilateral environmental agreements are, however, indirectly relevant to these crimes. Notably, the Minamata Convention on Mercury regulates the use and trade of mercury, which is often associated with illegal and artisanal gold mining. The Convention requires each party that has artisanal and small-scale gold mining and processing within its territory to take steps to reduce and, where feasible, eliminate the use and emissions and release to the environment of mercury in such mining.\footnote{Minamata Convention on Mercury, art. 7, para. 2.} It also establishes a framework for parties to regulate mercury use and reduce associated risks, and enforcement mechanisms that primarily involve national legislation, reporting requirements, compliance reviews, and international cooperation. Because the artisanal and small-scale gold mining sector is inextricably linked to economic development and poverty challenges, the Convention provides for flexible, country-specific solutions that are implemented through national action plans. Although each country’s approach is different in this context,\footnote{A list of national action plans is available at www.mercuryconvention.org/en/parties/national-action-plans.} annex C to the Convention lists the mandatory items to be included in each national action plan.\footnote{See also UNEP, Global Mercury Partnership and Minamata Convention on Mercury, Guidance Document: Developing a National Action Plan to Reduce and, Where Feasible, Eliminate Mercury Use in Artisanal and Small-Scale Gold Mining (2017).}

32. As illegal mining has an impact on fresh water and may cause water contamination from discharged wastewater and tailings, as well as from waste rock leaching, international and regional treaties related to the conservation of fresh water, international watercourses and water bodies, such as the Convention on the Protection and Use of Transboundary Watercourses and International Lakes,\footnote{Convention on the Protection and Use of Transboundary Watercourses and International Lakes, as amended, along with decision VI/3 clarifying the accession procedure. Adopted in 1992, entered into force in 1996.} which promotes cooperation towards the protection and sustainable management of transboundary surface and ground waters, are also relevant.
33. Other international treaties of relevance to illegal mining and trafficking metals and minerals include waste management treaties such as the Basel Convention,\(^49\) and treaties which relate to particular areas, such as the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) and the World Heritage Convention. Finally, the preservation provisions of the Convention on Biological Diversity are also of relevance. Illegal mining can negatively affect biodiversity, including through causing deforestation, declines in rare and threatened species and destruction of ecosystems as a consequence of mercury bioaccumulation.\(^50\)

E. Waste trafficking

34. Waste trafficking, which entails acts involving or related to movement or dumping of waste, whether within or across national borders, poses significant risks to human health and the environment. The principal international agreement of relevance to waste trafficking is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. The “overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of inappropriate management and transboundary movements of hazardous wastes”.\(^51\)

35. The Basel Convention establishes a procedure known as “prior informed consent”, under which parties are required to prohibit or refrain from permitting the export of hazardous and other wastes to an importing State if the importing State has not given its consent in writing to the specific import,\(^52\) where the latter State has not prohibited the import of such wastes outright.\(^53\) Consent is also required from any transit State, unless the transit State has dispensed with the requirement.\(^54\) The Basel Convention provides that parties to the Convention consider the illegal traffic in hazardous and other wastes to be criminal\(^55\) and requires parties to introduce appropriate legislative measures to prevent and punish illegal traffic and to cooperate with each other to this end.\(^56\) Parties are also obliged to take appropriate measures to ensure that the generation of hazardous and other wastes in their territory is reduced to a minimum\(^57\) and to ensure the availability of adequate disposal facilities for the environmentally sound management\(^58\) of hazardous and other wastes.\(^59\) Parties must further ensure that the transboundary movement of hazardous and other wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes,\(^60\) and are obliged to prevent the export or import of hazardous and other wastes where they have reason to believe that they will not be managed in an environmentally sound manner.\(^61\) An amendment to the Convention (the Ban Amendment), which entered into force on 5 December 2019, requires parties

\(^{49}\) Discussed above.


\(^{52}\) Basel Convention, art. 4, para. 1 (c). The prior informed consent procedure is given further detail by art. 6.

\(^{53}\) Ibid., art. 4, para. 1 (a)–(c).

\(^{54}\) Ibid., art. 6, para. 4.

\(^{55}\) Ibid., art. 4, para. 3.

\(^{56}\) Ibid., art. 9, para. 5. See also art. 4, para. 4. For the meaning of “illegal traffic” for the purposes of the Basel Convention, see art. 9, para. 1.

\(^{57}\) Basel Convention, art. 4, para. 2 (a).

\(^{58}\) Art. 2, para. 8, of the Basel Convention defines environmentally sound management as “taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes”.

\(^{59}\) Basel Convention, art. 4, para. 2 (b).

\(^{60}\) Ibid., art. 4, para. 2 (d).

\(^{61}\) Ibid., art. 4, para. 2 (e) and (g).
listed in annex VII to prohibit all transboundary movements of hazardous wastes destined for disposal in non-annex VII States, and also to prohibit all transboundary movements of hazardous wastes covered by article 1, paragraph 1 (a), of the Convention and destined for reuse, recycling or recovery operations in non-annex VII States. The UNODC publication entitled Combating Waste Trafficking: A Guide to Good Legislative Practices notes that States Parties to the Basel Convention and other relevant instruments must have regard to the annexes included in these instruments when developing domestic waste trafficking offences.

F. Pollution crime

36. Pollution encompasses a broad spectrum of activities and substances leading to the indirect or direct alteration of the biological, thermal, physical, or radioactive properties of the environment. Pollution may occur in relation to air, land, or water. Air pollution involves actions that release harmful substances into the atmosphere, leading to the deterioration of air quality. Land pollution occurs when toxic substances such as heavy metals or hazardous chemicals are released into the ground through dumping, spills, leakages or other modalities. Water pollution includes both the pollution of freshwater bodies as well as marine pollution.

37. Pollution may be the result of acute or immediate pollution events or the cumulative build-up of polluting substances resulting from continuous, ongoing or repeated releases of pollutants. The detrimental effects of pollution are not confined to local areas and may transcend geographical boundaries, affecting other regions and ecosystems. Transboundary pollution occurs when pollutants disperse across national borders, propelled by air or water currents. Moreover, the impact of pollution can be long-lasting and, in some cases, irreversible. Once released into the environment, certain pollutants like plastic waste or certain toxic chemical compounds can take centuries to degrade fully, persisting in ecosystems and causing ongoing harm to wildlife and natural habitats.

38. Pollution crime may be considered to refer to acts that cause or are likely to cause environmental harm through pollution to air, land, or water and which are deemed to be criminal offences under domestic law.

39. Air, land and water pollution has been addressed by a number of international treaties. These instruments generally outline shared responsibilities, promote cooperation among States and establish mechanisms for monitoring environmental standards at the international level to foster responsible and sustainable practices to protect the environment.

1. Air pollution

40. Air pollution is addressed, directly or indirectly, by several international agreements. The Kyoto Protocol to the United Nations Framework Convention on Climate Change indirectly addresses air pollution by committing industrialized

---

62 This includes wastes considered as hazardous by the Basel Convention but does not cover wastes that are only considered as hazardous by the domestic legislation of the Party of export, import or transit, not by the Convention.
63 Basel Convention, art. 4A. See also Secretariat of the Basel Convention, Countries, Ban Amendment, “Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal”, accessible at www.basel.int.
64 Waste Guide, pp. 32–33.
countries and economies in transition to limit and reduce greenhouse gas emissions in accordance with agreed individual targets. The Montreal Protocol on Substances that Deplete the Ozone Layer to the Vienna Convention for the Protection of the Ozone Layer also indirectly addresses air pollution by regulating substances like chlorofluorocarbons and hydrochlorofluorocarbons that also contribute to air pollution.\(^67\) Illegal trade in ozone-depleting substances controlled under the Protocol is dealt with at the State level through a system of export and import licenses enforced by relevant national authorities.\(^68\) The International Convention for the Prevention of Pollution from Ships (MARPOL Convention) addresses air pollution from ships through its annex VI on Prevention of Air Pollution from Ships, which entered into force in 2005. Annex VI limits air pollutants contained in ships’ exhaust gas, including sulphur oxides, particulate matter and nitrous oxides, prohibits deliberate emissions of ozone-depleting substances, and requires that ship operators maintain certain records.\(^69\) These records can be inspected by port state authorities during routine inspections, and non-compliance may lead to penalties or detention.

2. Land pollution

41. Because both industrial activities, such as chemical manufacturing and waste disposal, along with agricultural practices, including the use of pesticides, fertilizers and improper manure management, contribute to land pollution by releasing various contaminants into the soil, land pollution is mainly addressed through instruments regulating and preventing the release of chemicals and waste into the environment. The Basel Convention, discussed above, regulates the transboundary movement of hazardous wastes, including their import and export, and seeks to protect human health and the environment from, inter alia, the improper disposal or dumping of hazardous wastes, which could contribute to land, water or air pollution. Article 9 of the Basel Convention includes in the definition of “illegal traffic” used by the Convention any transboundary movement of hazardous or other wastes that results in deliberate disposal in contravention of the Convention and of general principles of international law.\(^70\)

42. The Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention) stands out as a pivotal international agreement that protects against pollution of land caused by persistent organic pollutants. The Convention aims to control and ultimately eliminate the production, use and release of persistent organic pollutants, many of which have been found to accumulate in soil and sediments. The control framework of the Stockholm Convention seeks to prevent further contamination of land and soil, reducing the long-term impact on ecosystems and human health. The Convention includes provisions for monitoring and reporting on the production, use and release of persistent organic pollutants.

3. Water pollution

43. Pollution of international and transboundary watercourses and international lakes are addressed by two international conventions adopted under the United Nations Economic Commission for Europe but which have been ratified by States from other regions. The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) serves as a mechanism to strengthen international cooperation and national measures for the ecologically sound management and protection of transboundary surface waters and groundwaters. Parties are required to, inter alia, take all appropriate measures to prevent, control and

---

\(^{67}\) The most recent amendment, adopted in Kigali in 2016, expanded the scope of the Montreal Protocol to cover the phase-down of hydrofluorocarbons, which closed a gap between the climate and the ozone regimes. See Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, art. IV. The amendment guarantees that the two regimes will be implemented in a way that supports each other.

\(^{68}\) Decisions XIV/7, XVII/16 and XXIV/12 of the Meeting of the Parties to the Montreal Protocol.

\(^{69}\) Annex VI (Regulation 22.1).

\(^{70}\) Basel Convention, art. 9(1)(e).
reduce pollution of waters causing or likely to cause transboundary impact.\textsuperscript{71} The Convention on the Law of the Non-Navigational Uses of International Watercourses also requires that watercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse.\textsuperscript{72} In seeking to conserve wetlands as regulators of water regimes and as habitats supporting a characteristic flora and fauna, especially waterfowl, the Ramsar Convention also indirectly touches upon the issue of water pollution.

44. Parties to the MARPOL Convention undertake to give effect to the Convention’s provisions in order to prevent the pollution of the marine environment by the discharge of harmful substances or effluents containing such substances in contravention of the Convention.\textsuperscript{73} The Convention establishes rules for preventing pollution and responding to incidents at sea, covering oil spills,\textsuperscript{74} air pollution\textsuperscript{75} and garbage disposal.\textsuperscript{76} Article 4 of MARPOL requires that violations of the Convention be prohibited and that sanctions be established by law. It does not make explicit reference to criminal sanctions but provides that “[t]he penalties specified under the law of a Party pursuant to the present Article shall be adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur”.\textsuperscript{77}


III. Conclusion

46. The Working Group of Government Experts on Technical Assistance may wish to consider the various issues examined above in their deliberations with respect to criminalization of crimes that affect the environment. The Working Group may further wish to consider:

(a) The use of MEAs by States parties to effectively prevent and combat crimes that affect the environment through legislative and other measures;

(b) The use of the Organized Crime Convention to prevent and combat crimes that affect the environment;

(c) Challenges, opportunities and best practices for addressing crimes that affect the environment, in particular through criminalization, under domestic law through the implementation of the Organized Crime Convention in conjunction with relevant MEAs;

(d) Identification of relevant technical assistance needs relating to the implementation of the Organized Crime Convention to prevent and combat crimes that affect the environment, including in conjunction with relevant MEAs;

\textsuperscript{71} Water Convention, art. 2(2)(a).
\textsuperscript{72} Art. 21(2).
\textsuperscript{73} MARPOL Convention, art. 1(1).
\textsuperscript{74} Annex I of MARPOL covers regulations for the prevention of pollution by oil. Specific references can be found in the text of Annex I, addressing matters such as oil discharge criteria, oil tankers and the prevention of oil pollution during bunkering.
\textsuperscript{75} Annex VI of MARPOL focuses on regulations to control air pollution from ships. It addresses issues such as sulfur oxide and nitrogen oxide emissions, as well as the use of energy efficiency measures.
\textsuperscript{76} Annex V of MARPOL addresses the prevention of pollution by garbage from ships. It provides regulations on the disposal of various types of garbage, including plastics and other solid waste.
\textsuperscript{77} MARPOL Convention, art. 4, para. 4.
(e) Effective cooperation and coordination between institutions with criminal justice mandates and institutions with environmental mandates at national and regional levels;

(f) Synergies between the Organized Crime Convention and other international treaties, particularly MEAs, in their application to prevent and combat crimes that affect the environment.

47. The Working Group may further wish to recommend that the Conference:

(a) Encourage States parties that have not yet done so to consider ratifying or acceding to the Organized Crime Convention and the MEAs relevant to preventing and combating crimes that affect the environment;

(b) Urge States parties to use the tools offered by the Organized Crime Convention to develop or amend national legislation, as necessary and appropriate, and to achieve, to the fullest extent possible, convergence in legislative approaches and sentencing policies in relation to crimes that affect the environment;

(c) Call upon States parties to make crimes that affect the environment, in appropriate cases, serious crimes, in accordance with their national legislation, as defined in article 2, paragraph (b), of the Convention;

(d) Encourage States parties to make use of tools developed by the United Nations Office on Drugs and Crime to assist States in the development and amendment of legislative frameworks to effectively prevent and combat crimes that affect the environment;

(e) Encourage States parties wishing to strengthen their legislative and policy frameworks to prevent and combat crimes that affect the environment to consider requesting technical assistance;

(f) Request the United Nations Office on Drugs and Crime, subject to the availability of extrabudgetary resources, and within its mandate, to continue to develop technical assistance tools and provide technical assistance, including capacity-building to State parties, upon request, for the purposes of supporting their efforts to effectively implement the Organized Crime Convention in preventing and combating transnational organized crimes that affect the environment, including their criminalization;

(g) Request the United Nations Office on Drugs and Crime, subject to the availability of extrabudgetary resources, to continue to collect, analyse and disseminate information related to responses to and the nature of crimes that affect the environment, with a view to ensuring the effective implementation of the Organized Crime Convention;

(h) Request States that have not yet done so to update their legislative records on criminalization of crimes that affect the environment in the knowledge management portal known as Sharing Electronic Resources and Laws on Crime (SHERLOC);

(i) Encourage States parties to MEAs relevant to preventing and combating crimes that affect the environment to make full use of these instruments as effective tools for addressing these crimes.