Environmental Assessments in the Context of Climate Change: The Role for the UN Economic Commission for Europe

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Abstract

The UN Economic Commission for Europe (UNECE) has played an important role in the recognition of a customary international law obligation for States to conduct an Environmental Assessment (EA) when a proposed activity is likely to have a transboundary impact. It is unclear, at present, whether this customary norm applies to the impacts of an activity on the global environment. In recent years, the EA frameworks of many UNECE Member States have been construed or revised so as to include consideration for the impact of proposed activities on climate change. The UNECE could help to establish this growing practice as a norm through the adoption of a dedicated instrument on EA in the context of climate change. This article documents ongoing developments in UNECE Member States and discussions that have taken place under the auspices of the UNECE and discusses next steps.

Keywords

Environmental Assessment – climate change – United Nations Economic Commission for Europe – Espoo Convention on Transboundary Environmental Impact Assessment

1 Introduction¹

Environmental Assessment (EA) has been used across the world for about half a century in order to ensure that decisions likely to have a significant impact on our environment are well informed. The importance of EA as an instrument for environmental protection was recognized, among others, through principle 17 of the Rio Declaration on Environment and Development.² Today, most countries in the world have a mandatory EA procedure applicable to projects and, often, also programmes, plans and policies, which are likely to have a significant impact on the environment.

On the other hand, historical and current greenhouse gas (GhG) emissions have already impacted our global environment in concerning ways. The Intergovernmental Panel on Climate Change (IPCC)'s Fifth Assessment Report estimated that the global average temperature on our planet has already increased by 0.85 °C.³ The IPCC also predicted that continued rates of GhG emissions would cause 'severe, pervasive and irreversible impacts for people and

¹ The author would like to thank two anonymous reviewers for very helpful comments and advise.

² 'Rio Declaration on Environment and Development' UN Doc A/CONF.151/26/Rev.1 (Vol. I), Annex I (14 June 1992) principle 17.

³ IPCC's Core Writing Team, Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2015), http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf, 2.

ecosystems.' Climate change is arguably the most severe environmental impact of human societies inasmuch as it may directly threaten our very existence as civilisation and species.

EA procedures have long been confined to harm affecting a particular place. In 1991, as the Member States UN Economic Commission for Europe (UNECE) were drafting the Convention on Environmental Impact Assessment in a Transboundary Context ('Espoo Convention'), they decided to exclude impacts 'exclusively of a global nature' from the scope of this instrument.⁵ Just a year later, the Earth Summit adopted the UN Framework Convention on Climate Change (UNFCCC), which stopped short of requiring that States conduct an EA when a proposed activity is likely to cause substantial GhG emissions.⁶ Few, in the early 1990s, considered this new tool for environmental protection (EA) as a way to address this growing concern of human kind (climate change).⁷

Today, climate change appears as a thornier issue than first thought – as issue which surely cannot be solved by any single tool taken in isolation. To reduce and eventually cease net GhG emissions, ⁸ States need to adopt complex regulatory toolkits, which include for instance technical standards, economic incentives and direct economic intervention. This realization has raised a new interest in the potential relevance of EA as part of a toolkit on climate change mitigation. In recent years, this question has been debated throughout the world but nowhere as vigorously in developed countries, in particular in Europe and Northern America. Cases have been brought to courts when projects had been approved without consideration for their impact on climate change, ⁹ while EA frameworks were revised or completed by guidance documents, ¹⁰ and international financial institutions now generally impose considerations for climate change mitigation in the EAs of activities for which support is sought. ¹¹ Yet, there remains considerable uncertainty, in many jurisdictions, as to whether the impact of a proposed activity on climate change should be considered as part of an EA and, if so, how. In the

⁴ Ibid 8.

⁵ Convention on Environmental Impact Assessment in a Transboundary Context (adopted 25 February 1991, entered into force 10 September 1997) 1989 UNTS 309 ('Espoo Convention') art 1(viii).

⁶ See however United Nations Framework Convention on Climate Change, May 9, 1992, 1771 UNTS 107 art 4(1)(f) ('UNFCCC').

⁷ For an exception, see N Robinson, 'International Trends in Environmental Impact Assessment' (1992) 19 Environmental Affairs 591, 606.

⁸ The objective of 'a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century' was included in art. 4.1 of the Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016), in annex of decision 1/CP.21 of the Conference of the Parties to the UN Framework Convention on Climate Change, 'Adoption of the Paris Agreement,' UN Doc FCCC/CP/2015/10/Add.1.

⁹ See for instance the cases cited *infra* note 83; *R* (on the application of Griffin) v Newham London Borough Council [2011] EWHC 53; Greenpeace New Zealand v Northland Regional Council [2007] NZRMA 87; Earthlife Africa Johannesburg v Minister of Environmental Affairs (case 65662/2016) [2017] ZAGPPHC 58, [2017] 2 All SA 519 (GP) (March 8), http://www.saflii.org/za/cases/ZAGPPHC/2017/58.pdf (South Africa); Gray v Minister for Planning and Others [2006] NSWLEC 720. See generally the "climate change litigation databases" developed by the Sabin Center for Climate Change Law and available at http://climatecasechart.com/.

¹⁰ See in particular the documents cited *infra* notes 78-81 and 84-77.

¹¹ See World Bank, Environmental and Social Framework Setting Environmental and Social Standards for Investment Project Financing (4 August 2016) 61, para 16; Asian Development Bank, Safeguard Policy Statement (June 2009) 16, para 2; Asian Infrastructure Investment Bank, Environmental and Social Framework (February 2016) 28. See generally The Equator Principles (June 2013), principle 2.

developing world, consideration for climate change mitigation in EAs remains rare and inconsistent. 12

This article argues that, in view of their common but differentiated responsibilities, ¹³ developed States should take the lead in developing EA as an effective tool for climate change mitigation. To exercise such leadership, this article suggests that an international instrument should affirm the relevance of EA in the context of climate change and help national authorities to address methodological issues. This instrument could consist in a non-binding guidance document adopted by the UNECE Member States or the Meeting of the Parties to the Espoo Convention, or it could take the form of an amendment to the Espoo Convention or an additional Protocol to it. Crucially, the adoption of this instrument would contribute to the recognition of the customary international law obligation for a State to conduct an EA in relation to any proposed activities likely to cause substantial GhG emissions.

This article focuses on the role of the UNECE as a forum through which some developed States could exercise global leadership. The UNECE has a history of successful leadership in environmental matters, including with regard to EA in a transboundary context¹⁴ and, more broadly, public participation. ¹⁵ While the EU is a central actor in the UNECE, the latter is larger and more diverse; it would be able to demonstrate the relevance of EA in the context of climate change not only among developed States, but also among countries with a lower level of development. Many UNECE Member States, which already implement EA as a tool for climate change mitigation, could be expected to support the adoption of an instrument showcasing their experience to other States in the region and beyond.

The article is structured as follows. Section 2 retraces the global recognition of EA as a norm in a transboundary context. Section 3 documents the emergence of EA in the context of climate change. Section 4 reviews the discussions that have taken place under the auspices of the UNECE in the last decade and a half. Finally, section 5 suggests that the UNECE could take new steps, including through the adoption of an international instrument, to exercise leadership in the adoption of EA as a tool for climate change mitigation in developed countries and beyond. Section 6 concludes.

2 The Global Recognition of EA in a Transboundary Context

The International Association for Impact Assessment defines EA as 'the process of identifying, predicting, evaluating and mitigating the bio-physical, social and other relevant effects of development proposals prior to major decisions being taken and commitments made.' As

¹² For a rare instance of a court in a developing country imposing consideration for GhG emissions in an EA, see *Earthlife Africa Johannesburg* (n 9). Regarding China and India, see infra, respective notes 73 and 74.

¹³ See UNFCCC (n 6) arts 3.1, 4.2(a).

¹⁴ Espoo Convention (n 5).

¹⁵ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 25 June 1998, entered into force 30 October 2001) 2161 UNTS 447 ('Aarhus Convention'). The Aarhus Convention served as a model to the adoption of the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (adopted 4 March 2018, not yet entered into force) LC/CNP10.9/5 ('Escazú Agreement')

¹⁶ J de Jesus, What Is Impact Assessment? 1 (International Association for Impact Assessment, n.d.) http://www.iaia.org/uploads/pdf/What is IA web.pdf.

described by the UN Environment Programme (UNEP), it involves 'an examination, analysis and assessment of planned activities with a view to ensuring environmentally sound and sustainable development.' In addition to an expert-led assessment of the environmental impacts of a proposed activity, EA procedures generally involve a process of political deliberations.

The origins of this tool can be traced back to the US National Environmental Policy Act (NEPA) of 1969. NEPA directs federal agencies proposing any 'major Federal actions' capable of having a significant impact on the environment to conduct public consultation on the basis of a 'detailed statement' of this possible impact. This statement is to document the likelihood and the nature of the impact as well as any possible alterations to the proposed action which could reduce its impact. Central to what came to be known as the 'NEPA review' is its nature as an 'ostensibly procedural commitment,' which does not directly impose any substantive standard. As Justice Stevens put it, the NEPA review mechanisms 'merely prohibits uninformed – rather than unwise – agency action.' The rationale for this mechanism is that public scrutiny based on a clear scientific assessment of the proposed activity would favour reasonable decision-making characterized by balanced consideration for environmental relevant concerns.

The concept of EA spread rapidly, within the United States through the adoption of 'mini-NEPA reviews' at the state level ²¹ and abroad to most countries. ²² The diffusion of this instrument was reflected and often encouraged at the international level. Although EA was discussed in the run-up to the Stockholm Conference on the Human Environment of 1972, it did not make it to the final declaration due to objections raised by some developing States. ²³ Yet, the adoption of this instrument was actively advocated by UNEP throughout the 1970s and 1980s. ²⁴ In 1982, the World Charter for Nature recognized the importance of EAs as a tool for environmental protection. ²⁵ In 1992, principle 17 of the Rio Declaration on Environment and Development stated that EAs 'shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a

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¹⁷ UN Environmental Programme, Goals and Principles of Environmental Impact Assessment (16 January 1987) preamble. The Goals and Principles of Environmental Impact Assessment were endorsed by decision 14/25 of the Governing Council of UNEP (17 June 1987) UN Doc A/42/25, para 1.

¹⁸ National Environmental Protection Act 1969 § 102, 42 USC § 4332(C) (2018) ('NEPA').

¹⁹ N Craik, *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (Cambridge University Press 2008) 5.

²⁰ Robertson v Methow Valley Citizens Council, 490 US 332, 351 (1989).

²¹ See for instance the California Environmental Quality Act, 2017 California Code Public Resources Code §§ 21000-21189.57; the Massachusetts Environmental Protection Act, General Laws of Massachusetts 2016 chapter 30, § 61.

²² See e.g. R Morgan, Environmental Impact Assessment: The State of the Art (2012) 30 Impact Assessment & Project Appraisal 5; H Abaza, R Bisset and B Sadler, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach* (UNEP 2004).

²³ See W Rowland, *The Plot to Save the World: The life and times of the Stockholm Conference on the Human Environment* (Clarke 1973) 54.

²⁴ 'UNEP Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States' in Report on the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States on the Work of its Fifth Session Held in Nairobi from 23 January to 7 February 1978, reprinted in 17 ILM 1094 (1978), principle 4; Goals and Principles of Environmental Impact Assessment (n 17) principle 11.

²⁵ See UNGA 'World Charter for Nature' UN Doc A/RES/37/7 (28 October 1982) paras 11(c) and 16.

competent national authority.' ²⁶ Today, EAs are required for certain projects, not only in virtually every developed State, ²⁷ but also in most developing countries, ²⁸ where implementation is gradually improving. ²⁹

A distinction was introduced, in the EU and some other jurisdictions, between two types of EA: project-level 'Environmental Impact Assessment' (EIA), and broader 'Strategic Environmental Assessment' (SEA) which relate to policies, plans and/or programmes adopted even before a particular project is drafted.³⁰ Elsewhere, the same instruments sometimes apply at the project and strategic levels.³¹ In this article, I refer to 'EA' in a general sense which encompasses both 'EIA' and 'SEA.'

The UNECE has played an important role in promoting EA as a mandatory instrument under international environmental law. This institution was established by the UN Economic and Social Council in March 1947 with the main objective of assisting the reconstruction of Western countries devastated by the Second World War. From the outset, the UNECE's membership was broad, including the USSR, most Eastern, Central and Western European States, as well as the United States. During the Cold War, this broad membership hindered negotiations on trade and economic matters. This led the UNECE to re-focus on environmental matters, a field where common ground for cooperation could more easily be

²⁶ 'Rio Declaration on Environment and Development' (n 2) principle 17. See also the draft of a Global Pact for the Environment proposed by an informal group of environmental lawyers and available at http://pactenvironment.emediaweb.fr/wp-content/uploads/2017/07/Global-Pact-for-the-Environment-project-24-June-2017.pdf, article 5(3).

²⁷ See e.g. NEPA (n 18) § 4332(C); Council Directive 85/337 (EED) of 27 June 1985 on the assessment

²⁷ See e.g. NEPA (n 18) § 4332(C); Council Directive 85/337 (EED) of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment [1985] OJ L175/40, replaced by Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment [2012] OJ L26/1; Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment [2001] OJ L197/30; Canadian Environmental Assessment Act 2012 § 52, S.C. 2012, c. 19.

²⁸ See e.g. Huanjing Yingxiang Pingjia Fa (环境影响评价法) [Environmental Impact Assessment Law] 28 October 2002 (China) ('China's EA law'); Ministry of Environment and Forests, Environmental Impact Assessment Notification, 27 January 1994, then replaced by Ministry of Environment and Forests, Environmental Impact Assessment Notification, 14 September 2006 (India). See generally 'Assessing Environmental Impacts: A Global Review of Legislation' (UN Environment Programme 2018) https://www.unep-wcmc.org/resources-and-data/assessing-environmental-impacts--a-global-review-of-legislation.

²⁹ See for instance A Clausen, An Evaluation of the Environmental Impact Assessment System in Vietnam: The Gap between Theory and Practice (2011) 31 Environmental Impact Assessment Review 136.

³⁰ Directive 2001/42 (n 27).

³¹ NEPA (n 18) 4332(C); China's EA law (n 28) arts 7 to 15. However, China's State Council adopted distinct modalities of application in Guihua Huanjing Yingxiang Pingjia Tiaoli (规划环境影响评价条例) [Regulation on Environmental Impact Assessment of Planning], Order No. 559, 17 August 2009. See generally 'Assessing Environmental Impacts: A Global Review of Legislation' (n 28) chapter 4.

³² UN ECOSOC, 'Economic Commission for Europe' (28 March 1947) resolution 36 (IV) in UN Doc

³² UN ECOSOC, 'Economic Commission for Europe' (28 March 1947) resolution 36 (IV) in UN Doc E/437.

³³ Ibid para 7.

³⁴ See generally G Myrdal, Twenty Years of the United Nations Economic Commission for Europe (1968) 22(3) International Organization 617.

found.³⁵ In 1979, the UNECE adopted the Convention on Long-Range Transboundary Air Pollution;³⁶ several other instruments followed in the 1990s, after the end of the Cold War.³⁷ Among these instruments were the Convention on EIA in a Transboundary Context, adopted in Espoo, Finland, in February 1991 ('Espoo Convention').³⁸

The Espoo Convention was an innovative instrument through which each Party committed to conduct an EIA when specified projects are likely to have transboundary impacts affecting another Party. Of 56 UNECE Member States, 44 are Parties to the Espoo Convention; only Russia, Turkey and a few other Eastern European or Central Asian States are not. ³⁹ In complement to the Espoo Convention, the UNECE adopted a Protocol on SEA in Kiev, Ukraine, in 2003 ('Kiev Protocol'); ⁴⁰ it currently has 32 Parties. ⁴¹ Whereas the Espoo Convention focuses on (project-level) EIA, the Kiev Protocol commands States to review plans and programmes likely to have an environment impact. But by contrast to the Espoo Convention, which is only concerned with transboundary impacts, the Kiev Protocol requires an assessment of environmental impacts even if they are confined within the State's borders.

Participation to the Espoo Convention was originally limited to the States members of the UNECE. In February 2001, the first session of the Meeting of the Parties to the Espoo Convention, taking place in Sofia, Bulgaria, adopted an amendment to the Convention to permit accession by UN Member States which are not members of the UNECE. ⁴² The 'Sofia Amendment' entered into force in August 2014, but its provision regarding accession by States not members of the UNECE will not become effective until the amendment is ratified by every State which was Party to the Espoo Convention in 2001. ⁴³ The Kiev Protocol, adopted two years after the Sofia Amendment, permits accession by any UN Member State. ⁴⁴ As of mid-2018, neither treaty has been ratified or accessed by any State which is not Member of the UNECE.

Whether or not a State has ratified the Convention and its Protocol, and notwithstanding their capacity to do so, the UNECE Member States have actively promoted 'the application of the principles of the Convention' across the world.⁴⁵ The Minsk Declaration, which they adopted

³⁵ ER DeSombre, Global Environmental Institutions (Taylor & Francis 2006) 98.

³⁶ Convention on Long-Range Transboundary Air Pollution (adopted 13 November 1979, entered into force 16 March 1983) 1302 UNTS 217.

³⁷ These include in particular the Convention on the Transboundary Effects of Industrial Accidents (adopted 17 March 1992, entered into force 19 April 2000) 2105 UNTS 457; the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (adopted 17 March 1992, entered into force 6 October 1992) 1936 UNTS 269; and the Aarhus Convention (n 15).

³⁸ See supra n 5.

³⁹ Russia signed but did not ratify the Espoo Convention. Information collected from UN Treaty Collection, accessed on 6 June 2018.

⁴⁰ Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (adopted 21 May 2003, entered into force 11 July 2010) 2685 UNTS 140 ('Kiev Protocol').

⁴¹ Information collected from UN Treaty Collection, accessed on 11 June 2018.

⁴² Amendment to the Convention on Environmental Impact Assessment in a Transboundary Context (adopted 27 February 2001, entered into force 26 August 2014), adopted by decision II/14 of the Meeting of the Parties to the Espoo Convention held in Sofia from 26 to 27 February 2001, 'Amendment to the Espoo Convention,' UN Doc ECE/MP.EIA/4 (7 August 2001) 144.

⁴³ See Espoo Convention (n 5), as modified by ibid, art 17(3).

⁴⁴ Kiev Protocol (n 40) art 23(3).

⁴⁵ 'Sofia Ministerial Declaration' UN Doc ECE/MP.EIA/4 at 145 (27 February 2001) para 13.

in June 2017, emphasizes that the Convention and its Protocol are 'effective instruments for realizing benefits worldwide.' ⁴⁶ This declaration also encourages States which are not members of the UNECE to implement the Convention even before they can accede to it. ⁴⁷ Exercising global leadership is arguably one of the central motivations for States, willing to implement EAs within their jurisdiction anyway, to ratify a treaty expressing such an obligation.

While the Espoo Convention and its Kiev Protocol stand out as the only treaties providing for a general obligation to conduct an EA,⁴⁸ other treaties adopted in the 1980s and 1990s contain specific obligations to carry out an EA under particular circumstances. The UN Convention on the Law of the Sea ('UNCLOS'), for instance, commands the conduct of an EA when a planned activity could cause pollution of the marine environment.⁴⁹ The Parties to the Convention on Biological Diversity pledged to conduct EIAs, 'as far as possible,' in relation to projects likely to have a significant adverse impact on biological diversity.⁵⁰ Some States have also committed to conduct an EA when an activity could have an environmental impact on the Antarctica.⁵¹ But these treaties, which relate to the management of shared resources, do not do as much as the Espoo Convention and its Kiev Protocol in framing EA as a global norm.

The Espoo Convention has certainly had some influence on the development of international environmental law. As a form of regional cooperation, it created a model that other regions sought to 'mimic,' ⁵² albeit with unequal success. ⁵³ Overall, the Espoo Convention has contributed to establishing a new norm by influencing State practice or perhaps more evidently the acceptation of such practice as law, hence contributing to the formation of a norm of customary international law. ⁵⁴ Thus, in 2010, a little more than a decade after the entry into

⁴⁶ 'Minsk Declaration' (16 June), reproduced in UN Doc ECE/MP.EIA/23/Add.1–ECE/MP.EIA/SEA/7/Add.1 (19 June 2017) 35, para 13.

⁴⁷ Ibid para 16.

⁴⁸ See Sofia Ministerial Declaration (n 45) para 3, 'not[ing] with great satisfaction that the Convention was the first significant international legally binding instrument dedicated to environmental impact assessment.'

⁴⁹ United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 397 ('UNCLOS') art 206. EA will also be discussed in forthcoming negotiations towards the adoption of an instrument on the conservation of sustainable use of marine biological diversity of areas beyond national jurisdiction. See UN General Assembly, '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' (24 December 2017) resolution 72/249 in UN Doc A/RES/72/249, para 2.

⁵⁰ Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79, art 14(1)(a).

⁵¹ Protocol on Environmental Protection to the Antarctic Treaty (adopted 4 October 1991, enterd into force 14 January 1998) 30 ILM 1455, art 8 and Annex I. See also 'Guidelines for Environmental Impact Assessment in the Arctic' (1997), drafted by the Finnish Ministry of the Environment on a request by the Arctic Environmental Ministers, https://www.unece.org/fileadmin/DAM/env/EIA/documents/EIAguides/Arctic_EIA_guide.pdf.

⁵² CM Kersten, Rethinking Transboundary Environmental Impact Assessment (2009) 34 Yale Journal of International Law 173, 178.

⁵³ On the draft North American Agreement on Transboundary Environmental Impact Assessment, see e.g. G Garver and A Podhora, Transboundary Environmental Impact Assessment as Part of the North American Agreement on Environmental Cooperation (2008) 26(4) Impact Assessment and Protect Appraisal 253.

⁵⁴ Customary international law can be identified based on the existence of a general practice of States accepted as law. See Statute of the International Court of Justice (adopted 26 June 1945, entered into force 24 October 1945) 59 Stat. 1055, art. 38.1(b); International Law Commission, Draft conclusions

force of the Espoo Convention, the International Court of Justice (ICJ) in *Pulp Mills on the River Uruguay* identified 'a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context.' While the Espoo Convention was not applicable to the Parties to that dispute, which had not ratified it, the ICJ interpreted the Convention, in its global normative context, as evidence of a customary norm. This finding was confirmed by the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea (ITLOS) in 2011⁵⁷ and by the ICJ itself in 2015. The second context is a series of the International Tribunal for the Law of the Sea (ITLOS) in 2011⁵⁷ and by the ICJ itself in 2015.

3 EAs in the Context of Climate Change: Hesitations

The existence of an obligation of States to conduct an EA is relatively well-established, in treaty law for the Parties to the Espoo Convention and in customary law for others, in a transboundary context where an activity on one side of a border causes environmental harms in a particular area across the border. However, it is unclear whether this obligation is applicable in the context of climate change, in relation to the GhG emissions that a proposed activity could entail and their impact on the global climate system.

One way to approach this question is by logical inference from the no-harm principle – the due diligence obligation of States to prevent activities likely to cause transboundary environmental harm. It is on the basis of the no-harm principle that, in *Pulp Mills*, the ICJ inferred an obligation to carry out an EA when a proposed activity is likely to cause transboundary environmental harm. ⁵⁹ If a State must refrain from causing harm to *one* of its neighbours (i.e. transboundary environmental harm), it should also – a fortiori – refrain from causing harm to *all* other States and to humankind as a whole (global environmental harm). ⁶⁰ Accordingly, it has been argued elsewhere that the no-harm principle extends to the context of climate change and requires States to prevent excessive GhG emissions. ⁶¹ This suggests that the obligation to conduct an EA, being a corollary of the due diligence obligation held by States under the no-harm principle, would a priori also apply in the context of climate change – unless particular reasons appear to exclude the relevance of EA in this particular context.

The Seabed Disputes Chamber of ITLOS adopted a similar analysis in its Advisory Opinion on Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area. The Tribunal concluded that the obligation identified by the ICJ in Pulp

on identification of customary international law adopted in first reading, in *Report of the International Law Commission at its Seventieth Session*, UN Doc A/73/10 (forthcoming).

⁵⁵ Pulp Mills on the River Uruguay (Argentina v Uruguay) (Judgment) [2010] ICJ Rep 14, para 204.

⁵⁶ See ibid paras 203 and 205. See also the separate opinion of judge Cançado Trindade, para 173.

⁵⁷ Responsibilities and obligations of States with respect to activities in the Area, Case No. 17, Advisory Opinion of 1 February 2011, ITLOS Rep 10, paras 141-150.

⁵⁸ Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v Costa Rica) (Judgment) [2015] ICJ Rep 665, para 104. See also the separate opinion of Judge Bhandari.

⁵⁹ Pulp Mills on the River Uruguay (n 55) para 204.

⁶⁰ Thus, by analogy, the Convention on Biological Diversity makes no difference between transboundary and global environmental harm. See Convention on Biological Diversity (n 50) art. 14. ⁶¹ See discussion in B Mayer, 'The Relevance of the No-Harm Principle to Climate Change Law and Politics' (2016) 19 Asia-Pacific Journal of Environmental Law 79; B Mayer, *The International Law on Climate Change* (Cambridge University Press 2018). See also A Zahar, 'The Contested Core of Climate Law' (2018) 8(3-4) *Climate Law* (forthcoming), and B Mayer, 'The Place of Customary Norms in Climate Law: A Reply to Zahar' (2018) 8(3-4) *Climate Law* (forthcoming).

Mills 'may also apply to activities with an impact on the environment in an area beyond the limits of national jurisdiction.' However, the question at issue before the Tribunal regarded environmental impacts to the seafloor beyond any State's jurisdiction – impacts which, although not under any State's exclusive jurisdiction, remain confined to a particular space.

In the context of climate change, one could object to the application of the obligation to conduct an EA as a corollary of the due diligence obligation on the ground that the impacts of GhG emissions are diffuse and largely untraceable. 63 To support this objection, one would likely argue that, due to the complex and indirect relation between GhG emissions and the social impacts of climate change, no affected population could readily be identified, which would limit the relevance of public participation. Accordingly, the objection would go, EA is only relevant in relation to activities causing environmental impacts on a particular region, affecting a specific population which can be represented in the EA process. However, if public participation is certainly an important feature of EA, its function is not necessarily confined to ensuring the representation of affected populations. For instance, it is not uncommon for an EA to document environmental impacts which would affect ecosystems but not human societies, or environmental impacts which would affect the interests of future generations. In such cases, public participation seeks to promote a meaningful deliberation among reasonable, wellinformed citizens who, looking beyond their own interests, reflect on their vision of the common good. Likewise, in lieu of public participation, treaty-based EA procedures which relate to uninhabited areas such as the sea and the Antarctic allow other State Parties to be informed and (whether or not through a formal process) to communicate their view.⁶⁴

Nevertheless, logical inference from other norms may not be sufficient to demonstrate the existence of an obligation of States to conduct EAs for projects likely to contribute to climate change. It is generally understood that evidence for the existence of a customary norm is to be found in the general practice of States accepted as law.⁶⁵ While there are elements supporting the existence of both elements, neither is clearly established for the time being.

On the one hand, while the Espoo Convention provides strong support to the acceptance as law of EA in relation to transboundary environmental harm, the obligations it defines do not extend to global environmental harms. The Convention includes effects on 'climate' among the potential impacts, ⁶⁶ but it defines a 'transboundary impact' as an impact 'not exclusively of a global nature.' GhG emissions, which are typically of no consequences at the place where they occur, are an archetypal example of an activity causing environmental impacts 'exclusively of a global nature.' The exclusion of global environmental damages from the scope of the Espoo Convention does not necessarily mean that such damages are not included in the obligation of States to conduct an EA under customary international law, but the Espoo Convention is simply unhelpful in making the case.

⁶² Responsibilities and obligations of States with respect to activities in the Area (n 57) para 148.

⁶³ Attribution of particular events to climate change remains problematic, not just for lack of scientific evidence, but also due to the probabilistic nature of the concept of climate. See generally M Hulme, Attributing Weather Extremes to 'Climate Change': A Review (2014) 38(4) Progress in Physical Geography: Earth and Environment 499.

⁶⁴ See UNCLOS (n 49) arts 205 and 206; Protocol on Environmental Protection to the Antarctic Treaty (n 51) Annex I arts 3.2 and 3.6.

⁶⁵ See *supra* (n 54).

⁶⁶ Espoo Convention (n 5) art 1(vii).

⁶⁷ Ibid art 1(viii).

As noted, the Kiev Protocol adds to the Espoo Convention by requiring the conduct of a SEA in relation to plans and programmes which 'are likely to have significant environmental, including health, effects.' By contrast to 'impact,' 'effects' could more easily be construed in an abstract sense, so as to include diffuse and largely untraceable harm such as those resulting from GhG emissions. Here again, the Protocol includes 'climate' among the list of potential effects of concerns. ⁶⁹ Provisions on transboundary consultations relate to 'the affected Party,' ⁷⁰ which implies that they only apply when a particular State is specially affected by, presumably, an environmental impact producing harm in a particular area. Yet, broader provisions of the Kiev Protocol require the conduct of a SEA whether or not the impact would take place in a transboundary context. ⁷¹ These provisions may be interpreted in the sense that the obligation to conduct an SEA is applicable in circumstances where the plan or programme has a diffuse 'effect' on the global environment, including through the emission of GhGs.

On the other hand, the growing practice of States in implementing EA in the context of climate change may not yet have reached the threshold required to demonstrate the existence of a customary norm. Few developing States include consideration for climate change in their EA. For instance, GhG emissions are not usually included in EAs conducted in emerging economies such as China 73 – the world's largest GhG emitter – or India. 74

By contrast, many UNECE Member States, including those which are Parties to the Espoo Convention and its Kiev Protocol, have recognized the benefits of mainstreaming climate change mitigation in EA procedures. In particular, the EU Commission has long held that climate change mitigation should be mainstreamed in national EA legislations; ⁷⁵ it issued guidance documents in 2013⁷⁶ and, in 2014, a directive commanded EU Member States to revise their national legislation to integrated consideration for GhG emissions in their EA frameworks by 2017. ⁷⁷ Likewise, Canada (which is not a party to the Kiev Protocol) and the United States (which is not a party to either treaty) have also recognized the relevance of EA in the context of climate change. The US Council on Environmental Quality's draft guidance on consideration of the effects of climate change and GhG emissions in NEPA reviews, first

⁶⁸ Kiev Protocol (n 40) art 5(1).

⁶⁹ Ibid art 2(7).

⁷⁰ Ibid art 10(1).

⁷¹ In articular ibid arts 5-9.

⁷² For an important exception, see *Earthlife Africa Johannesburg* (n 9).

⁷³ No mention of GhG emissions could be found in China's EA law (n 28), in the Regulation on Environmental Impact Assessment of Planning (n 31), or in a sample of EIA reports and cases relating to GhG-intensive activities.

⁷⁴ No mention GhG emissions could be found in the 2006 Notification (n 28) or in a sampling of recent EIA reports on relevant activities.

⁷⁵ EU Commission, 'Report on the Application and Effectiveness of the EIA Directive' (23 July 2009) COM(2009) 378 final, EU Doc 52009DC0378 para 3.5.4.

⁷⁶ See EU Commission, 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment' (2013), http://ec.europa.eu/environment/EIA/pdf/EIA%20Guidance.pdf; and EU Commission, 'Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment' (2013), http://ec.europa.eu/environment/EIA/pdf/SEA%20Guidance.pdf.

⁷⁷ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment [2014] OJ L124/1, Annex IV para 5(c).

issued in 1997,⁷⁸ was revised in 2010⁷⁹ and 2014.⁸⁰ Although the final guidance of 2016⁸¹ was withdrawn in 2017,⁸² courts have continued to rely on the 2014 draft guidance as persuasive authority. ⁸³ In Canada, a federal-provincial-territorial committee issued a guidance on consideration for climate change in EA in 2003,⁸⁴ and steps were taken in recent years at the provincial level.⁸⁵ At the time of finalizing this article, the Parliament of Canada was in the process of adopting a Government Bill which would recognize 'that impact assessment contributes to Canada's ability to meet its environmental obligations and its commitments in respect of climate change.'⁸⁶

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⁷⁸ CEQ, Executive Office of the President, 'Draft Guidance Regarding Consideration of Global Climate Change in Environmental Documents Prepared Pursuant to the National Environmental Policy Act' (8 October 1997).

⁷⁹ CEQ, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions (8 February 2010), https://ceq.doe.gov/docs/ceq-regulations-and-guidance/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf.

⁸⁰ CEQ, Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews (24 December 2014), 69 Federal Regulations 77802. See generally JA Wentz, Draft NEPA Guidance Requires Agencies to Consider Both GHG Emissions and the Impact of Climate Change on Proposed Actions (2015) 26 Environmental Law in New York 57.

⁸¹ CEQ, Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (5 August 2016), 81 Federal Regulations 51866, https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf.

Executive Order No 13783, 'Promoting Energy Independence and Economic Growth' (28 March 2017) s. 3(c). See also CEQ, Withdrawal of Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (Apr. 5, 2017), 82 Fed. Reg. 16576, confirming that 'the withdrawal of the guidance does not change any law, regulation, or other legally binding requirement' (16576-77). See AquAlliance v US Bureau of Reclamation, 287 F.Supp.3d 969, 1028 (E.D. Cal. 2018). See also Center for Biological Diversity v National Highway Traffic Safety Administration, 538 F.3d 1172 (9th Cir. 2008); Border Power Plant Working Group v Department of Energy, 260 F. Supp. 2d 997 (S.D. Cal. 2003); Mid States Coalition for Progress v Surface Transportation Board, 345 F. 3d 520 (8th Cir. 2003).

⁸⁴ The Federal-Provincial-Territorial Committee on Climate Change and Environmental Assessment, 'Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners' (2003), https://www.canada.ca/content/dam/canada/environmental-assessment-agency/migration/content/a/4/1/a41f45c5-1a79-44fa-9091-

d251eee18322/incorporating_climate_change_considerations_in_environmental_assessment.pdf.

⁸⁵ See e.g. Ministry of the Environment and Climate Change, 'Considering Climate Change in the Environmental Assessment Process' (2017), https://www.ontario.ca/page/considering-climate-change-environmental-assessment-process (Ontario); Regulation on Environmental impact assessment and review procedure of certain projects, D. 287-2018, (2018) G.O. II, 1719A, Mar. 23, 2018, http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=1&file=68135.pdf (Quebec).

⁸⁶ See Bill C-69, 'An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts', as passed by the House of Commons on 20 June 2018. As of August 2018, this bill was still being reviewed by the Senate.

Kazakhstan appears as the main exception to this general trend among the Parties to the Espoo Convention. A law of 2011 specifically excluded 'the impact of greenhouse gas emissions' from the scope of the national EA framework. This was apparently a misconceived attempt to avoid what was seen as a risk of functional redundancy with a carbon market which was provided for by the same law. Carbon markets cover, at best, about half of a country's GhG emissions; 88 EA procedure may at least play a complementary role with regard to activities which are not covered. Even in relation of activities covered by a carbon market, EAs have a distinct function: providing a prior assessment of the social, environmental and economic costs and benefits of a proposed activity on the long-term and a detailed assessment of any potential improvement of this activity. The proponents of some activities may have the financial capacity to pay for emission allowances even though the activity would not contribute to economic or social wellbeing. The EU as well as some US states and Canadian provinces are among the jurisdictions where an EA procedure complements a market-based mechanism as part of a toolkit on climate change mitigation.

Altogether, the UNECE covers most of the countries where important developments have taken place with regard to the implementation of EA as a tool for climate change mitigation. However, developments often occurred in each jurisdiction in isolation from others, with little exchange of experience and ideas among States. Kazakhstan's 2011 law illustrates some of the common misunderstandings about the role of EA as part of a toolkit on climate change mitigation, even in a State Party to the Espoo Convention. Consistency would be more likely to be achieved in the practice of UNECE Member States, and developments would be more likely to take place in third countries, if the experience gained at the national level in most of Europe and Northern America could be documented, consolidated and endorsed at the international level, giving it greater visibility and stronger credibility. This, as argued in the following two sections, could be done with the adoption of an international instrument under the auspices of the UNECE.

4 Debates on EA as a Tool for Climate Change Mitigation under the UNECE

Discussions on the relation between EA and climate change have taken place in relation to the Espoo Convention and the Kiev Protocol for more than a decade. In June 2004, for instance, the third session of the Meeting of the Parties to the Espoo Convention adopted a guidance document on the practical application of the Convention which mentioned 'activities with linkages to climate change' among long-range transboundary impacts to which the Convention

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⁸⁷ 2018 Environmental Code of the Republic of Kazakhstan, art 39(2)(1). This provision was added to the Environmental Code by the Law of the Republic of Kazakhstan No 505-IV (3 December 2011), which provided for a carbon market.

⁸⁸ For a critical overview of economic mechanisms in general, see M Mehling and E Tvinnereim, Carbon Pricing and the 1.5°C Target: Near-Term Decarbonisation and the Importance of an Instrument Mix (2018) 12(1) Carbon & Climate Law Review 50.

⁸⁹ At the extreme, an eccentric billionaire who would like to purchase and burn large quantities of coal for no other purpose than his own enjoyment should arguably not be allowed to do so just because he is able to pay for emission allowances.

⁹⁰ Developments have also taken place outside the UNECE, for instance Australia and South Africa. See respective *Barbone and Ross* (on behalf of Stop Stansted Expansion) v Secretary of State for Transport [2009] EWHC 463; R (on the application of Griffin) v Newham London Borough Council [2011] EWHC 53; and Earthlife Africa Johannesburg (n 9). It remains nevertheless that the integration of climate change mitigation in EA is the rule in UNECE Member States, whereas it is the exception outside.

could be applied.⁹¹ Curiously, the Parties thus omitted the fact that the Convention does not apply to impacts exclusively of a global nature.⁹² Since then, discussions have periodically taken place under the auspices of the UNECE and, more specifically, by the Meetings of the Parties to the Espoo Convention and its Kiev Protocol. These developments have largely reflected the 'waves' of political momentum generated by the negotiations under the UNFCCC, in particular around the 2009 Copenhagen Summit and the 2015 Paris Summit.

The fourth session of the Meeting of the Parties, in May 2008, coincided with the 10-year anniversary of the entry into force of the Convention. At a panel organized at this occasion, Ms. Elizabeth Wilson, Principal Lecturer in Environmental Planning at Oxford Brookes University, made the case for EAs to include consideration of a project's impact on climate change. ⁹³ In the discussion that followed, participants agreed that 'SEA appears to be an appropriate mechanism to deal with climate change impacts.' ⁹⁴ The Panel's summary report suggests that, by contrast to SEA, objections were raised to the relevance of EIA as a tool for climate change mitigation. ⁹⁵

At the same meeting, States from the Baltic Sea sub-region agreed to convene a workshop on 'EIA/SEA and Climate Change,' ⁹⁶ which took place in Vilnius, Lithuania, in October 2009 – less than two months before the Copenhagen Summit and just a few hundred kilometres away. The workshop participants took note of developments occurring in some European countries, but they also noted that 'climate change often was not dealt with in a serious way in many EIAs.' ⁹⁷ The EU Commission highlighted a need for the EA community 'to direct more efforts to the climate change issue.' ⁹⁸ Some discussants expressed a view that 'it was difficult to treat climate change issues when dealing with EIAs for industrial projects and that it was more relevant to do it on the SEA level.' ⁹⁹ Here again, the emphasis was on SEA rather than on project-level EIA. In November 2010, the Working Group on Environmental Impact Assessment under the Espoo Convention hosted another seminar where participants regretted

⁹¹ Guidance on the Practice Application of the Espoo Convention, in Appendix of decision III/4 of the Meeting of the Parties to the Espoo Convention held in Cavtat, Croatia, from 1 to 4 June 2004, 'Guidelines on good practice and on bilateral and multilateral agreements,' UN Doc ECE/MP.EIA/6 (13 September 2004) 56, para 26.

⁹² Espoo Convention (n 5) art 1(viii).

^{93 &#}x27;Report of the meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context on its Fourth Meeting, held in Bucharest from 19 to 21 May 2008,' UN Doc ECE/MP.EIA/10 (28 July 2008) https://www.unece.org/fileadmin/DAM/env/documents/2008/EIA/ece.mp.EIA.10.e.pdf, 10 para 32. See also the presentation, E Wilson, 'Environmental assessment and climate change' (20 May 2008) https://www.unece.org/fileadmin/DAM/env/EIA/documents/bucharest/Wilson.pdf. While Wilson highlighted that 'climate' was among the impacts covered by the Convention, neither the summary report of the meeting, nor her slides indicate that she mentioned the exclusion of harm exclusively of a global nature.

⁹⁴ 'Report of the meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context on its Fourth Meeting' (n 93) at 10 para 33 (emphasis added).

⁹⁵ Ibid.

⁹⁶ Ibid at 135.

⁹⁷ Swedish Ministry of the Environment, 'Cooperation on the EIA Convention in the Baltic Sea subregion: Report of a Seminar in Vilnius 22-23 October 2009' (March 2010) https://www.unece.org/fileadmin/DAM/env/EIA/documents/Events/VilniusOct09/VilniusReport.pdf,

⁹⁸ Ibid at 7.

⁹⁹ Ibid.

the lack of adequate tools, in particular consolidated guidance, that States could use to integrate climate change mitigation (and adaptation) in their EIA and SEA. 100

In June 2011, the fifth session of the Meeting of the Parties to the Espoo Convention coincided with the first meeting of the Parties to the Kiev Protocol and a high-level meeting of the representatives of UNECE Member States. Marking the culmination of the discussions held since the fourth session, the UNECE Member States declared 'that strategic environmental assessment can be an appropriate mechanism to introduce the consideration of climate change impacts in plans and programmes that are prepared for regional development planning.¹⁰¹ The Parties to the Kiev Protocol agreed to convene more sub-regional workshops and as well as a conference on 'climate change and EIA,' subject to the availability of funding. ¹⁰² By contrast, the Meeting of the Parties took no initiative on the topic, despite the outcomes of the seminar held by its working group.

Little happened in the following years. The momentum for action on climate change had clearly gone. The conference agreed upon by the Parties to the Kiev Protocol was cancelled for lack of funding, ¹⁰³ and no evidence could be found that any sub-regional workshop was organized on the topic. There was nothing to suggest that the Parties had decided not to integrate climate change in EAs, but discussions on climate change did not have enough political support to prevail over other agenda items, for instance the application of EIA to nuclear plants and largescale projects.

With the entry into force of the Kiev Protocol in July 2010, there may also have been a sense that the issue had been addressed. In an online publication on the UNECE and climate change of April 2016, the UNECE Secretariat affirms that the Kiev Protocol 'provides a mechanism for integrating climate change considerations into sectoral development plans and programmes.' 104 However, as discussed in next section, the entry into force of the Kiev Protocol does not suffice to ensure that climate change mitigation is properly integrated in EA processes among the State Parties or that leadership is exercised beyond the UNECE. Even though the Kiev Protocol could be interpreted as requiring its Parties to include consideration for climate change mitigation in their SEAs, ¹⁰⁵ guidance could help ensure that such assessment is not purely formulaic. Moreover, a clearer instrument of the relevance of SEA

¹⁰⁰ 'Report of the Working Group on Environmental Impact Assessment on its fourteenth meting' UN ECE/MP.EIA/WG.1/2010/5 (18)January 2011) https://www.unece.org/fileadmin/DAM/env/documents/2010/EIA/wg.1/ece.mp.EIA.wg.1.2010.5.e.pd f, 11, in particular paras 5 and 8. The presentations are available on the website of the UNECE at https://www.unece.org/env/EIA/meetings/wg EIA 14.html#/jfmulticontent c7021-3.

^{101 &#}x27;Report of the Meeting of the Parties to the Convention serving as the Meeting of the Parties to the first Meeting' UN Doc ECE/MP.EIA/SEA/2 its (16 https://www.unece.org/fileadmin/DAM/env/documents/2011/EIA/sea/ece.mp.EIA.sea.2.e.pdf para 8.

¹⁰² Ibid 25, 26 and 27.

¹⁰³ 'Report of the Working Group on Environmental Impact Assessment and Strategic Environmental Assessment on its first meeting' UN Doc ECE/MP.EIA/WG.2/2012/2 (25 June 2012) https://www.unece.org/fileadmin/DAM/env/documents/2012/EIA/wg.2/ece.mp.EIA.wg.2.2012.2.e.pd f, 8 para 32.

UNECE, **'UNECE** and Climate Change' (April 2016) https://www.unece.org/fileadmin/DAM/information/1529385_UNECE_climate_change_interactive.p

¹⁰⁵ See above, note 71 and accompanying text.

could provide leadership beyond the UNECE. Overall, the Kiev Protocol being limited to SEAs, it does not recognize the role that EIAs could play at the project level.

The Paris Summit of December 2015 gave a new impetus to discussions on climate change within the UNECE. In April 2016, the Working Group on Environmental Impact Assessment and Strategic Environmental Assessment decided that a high-level panel on climate change would be organized at the seventh session of the Meeting of the Parties to the Espoo Convention. ¹⁰⁶ In November 2016, the same Working Group agreed, again, on the need to '[f]urther promote the role of the Convention and the Protocol in addressing key challenges, such as climate change or the achievement of the Sustainable Development Goals.' ¹⁰⁷

The theme was central to the seventh session of the Meeting of the Parties to the Convention and the third session of the Meeting of the Parties to the Protocol, held conjointly in Minsk in June 2017. The Secretariat presented an information note which noted that 'the provisions of the Protocol or the Convention are not yet consistently and fully used for addressing climate change.' A high-level Panel discussion was organized on the role of the two treaties in addressing climate change. Case studies were presented by State representatives. This was followed by an intervention of a UN Development Programme (UNDP) officer arguing that 'it was timely to provide guidance and/or to exchange information between Parties to the Espoo Convention and its Protocol and other potentially interested United Nations Member States.' Lastly, a representative of European ECO Forum, a coalition of NGOs, called for the organization of experience-sharing activities, the adoption of recommendations by the Parties to the Convention and the Protocol, and cooperation with the UNFCCC and the IPCC. 111

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¹⁰⁶ 'Report of the Working Group on Environmental Impact Assessment and Strategic Environmental Assessment on its fifth meeting' UN Doc ECE/MP.EIA/WG.2/2016/2 (18 May 2016) http://www.unece.org/fileadmin/DAM/env/documents/2015/EIA/WG/WG5 report ece.mp.EIA.wg.2. http://www.unece.org/fileadmin/DAM/env/documents/2015/EIA/WG/WG5 report ece.mp.EIA.wg.2. http://www.unece.org/fileadmin/DAM/env/documents/2015/EIA/WG/WG5 report ece.mp.EIA.wg.2. https://www.unece.org/fileadmin/DAM/env/documents/2015/EIA/WG/WG5 report ece.mp.EIA.wg.2.

¹⁰⁷ 'Report of the Working Group on Environmental Impact Assessment and Strategic Environmental Assessment on its sixth meeting' UN Doc ECE/MP.EIA/WG.2/2016/4 (30 January 2017) http://www.unece.org/fileadmin/DAM/env/documents/2016/EIA/WG/22_12_ece_mp.EIA_wg.2_2016_4_e_report.pdf, para 18(b)(iv).

¹⁰⁸ 'Information on panel discussion on the role of the Protocol and the Convention in addressing climate change' UN Doc. ECE/MP.EIA/2017/INF.10 (n.d.) https://www.unece.org/fileadmin/DAM/env/documents/2017/EIA/MOP7/REV_1_ECE.MP.EIA.2015
.INF.10 Climate panel 23052017 rev.pdf, para 7.

^{&#}x27;Report of the Meeting of the Parties to the Convention on its seventh session and of the Meeting of the Parties to the Convention serving as the Meeting of the Parties to the Protocol on its third session' UN Doc ECE/MP.EIA/23–ECE/MP.EIA/SEA/7 (19 September 2017) https://www.unece.org/fileadmin/DAM/env/documents/2017/EIA/MOP7/22 12 ece mp EIA 23 ec emp EIA sea 7 eng pdf.pdf, paras 53-62.

summary of Mr J Dusik's intervention, in ibid para 59. See also the presentation: J Dusik, 'Is there a need for consolidated European experience with integration of climate change concerns into EIA and SEA?' (16 June 2017) https://www.unece.org/fileadmin/DAM/env/documents/2017/EIA/MOP7/Panel Presentations/Jiri Dusik Espoo Conv MOP June 2017 UNDP.pdf.

¹¹¹ Summary of Ms Mara Silina's intervention, in UNECE, ibid para 60. See also M Silina, 'Should Climate Change be included in EIA and SEA?' (16 June 2017) https://www.unece.org/fileadmin/DAM/env/documents/2017/EIA/MOP7/Panel Presentations/Present ation-Mara-Silina-Espoo-SEA-MOP-Minsk-June2017-final.pdf.

At the same session, the joint Meetings of the Parties recognized the need to '[s]et a vision for the coming years to address priorities and to meet challenges, including with respect to climate change.' This vision was reflected in the list of activities awaiting funding adopted jointly under the Convention and its Protocol; but, while the vision was of a general ambit, the activities focused exclusively on SEAs. For instance, it was decided that a sub-regional conference should be organized in Eastern Europe, the Caucasus and Central Asia for capacity-building and the drafting of guidance 'on the application of SEA to climate change mitigation.' A workshop or seminar was also to be organized for awareness-raising among representatives of Member States. Further funding was sought for the development of good practice recommendations for the integration of climate change in SEA.

A meeting of all UNECE Member States was organized back-to-back to the seventh Session of the Meetings of the Parties. A declaration adopted at this occasion emphasized the role of SEA as 'a key tool for the development of national climate change action and planning, and for the incorporation of specific climate change mitigation and adaptation measures into regional development and sectoral plans, programmes and policies.' Here again, however, nothing was said about the relevance of EIAs.

5 Going Forward: The Potential Leadership of the UNECE

While important discussions have been held under the auspices of UNECE, in particular under the Espoo Convention and its Kiev Protocol, more concrete steps need to be taken in order to facilitate the integration of climate change mitigation in EAs.

5.1 SEA and beyond: the relevance of EIA

Firstly, the UNECE has not sufficiently recognized the importance of EIA, by contrast to SEA, as a tool for climate change mitigation. There appear to be two motives for the UNECE's emphasis on SEA, one normative, the other conceptual. Normatively, discussions of EIA might be hindered by the language of the Espoo Convention, which is limited to transboundary impacts to the exclusion of impacts exclusively of a global nature, ¹¹⁷ whereas the provisions of the Kiev Protocol, having been negotiated a decade later, are more inclusive, hence more prone to integrating climate change mitigation. However, nothing prevents the Meeting of the Parties from discussing matters related to the purpose of the Convention even if they do not

¹¹² Decision VII/7–III/6 of the Meeting of the Parties to the Espoo Convention and of the Meeting of the Parties to the Convention serving as the Meeting of the Parties to the Kiev Protocol held in Minsk from 13 to 16 June 2017, 'Development of a strategy and an action plan for the future application of the Convention and the Protocol', UN Doc ECE/MP.EIA/23/Add.1–ECE/MP.EIA/SEA/7/Add.1 (19 September 2017) 34 para 1(a).

^{113 &#}x27;Annex II: List of activities awaiting funding and/or identification of lead countries or organizations for the implementation of the Convention and its Protocol for the period 2017-2020' in Annex II of Decision VII/3–III/3 of the Meeting of the Parties to the Espoo Convention and of the Meeting of the Parties to the Convention serving as the Meeting of the Parties to the Kiev Protocol held in Minsk from 13 to 16 June 2017, 'Adoption of the workplan,' UN Doc ECE/MP.EIA/23/Add.1–ECE/MP.EIA/SEA/7/Add.1 (19 September 2017) 3, 19.

¹¹⁴ Ibid 21.

¹¹⁵ Ibid 23.

^{&#}x27;Minsk Declaration' (16 June 2017), reproduced in UN Doc ECE/MP.EIA/23/Add.1–ECE/MP.EIA/SEA/7/Add.1 (19 June 2017) 35, para 9.

117 Espoo Convention (n 5) art 1(viii).

fall within the scope of the Convention, 118 at least as far as no Party objects. And if the scope of the Convention was nevertheless a constraint, discussions on EIA in the context of climate change could alternatively be carried out by an ad hoc working group reporting to the UNECE Member States, rather than under the Espoo Convention.

Conceptually, and perhaps more importantly, emphasis on SEA rather than EIA may be related to a sense that GhG emissions are more adequately addressed at a larger scale and at the strategic level. Many structural decisions are made when programmes, plans or policies are adopted, for instance with the choice between developing thermal power plants or renewable energy sources. These decisions have often implications at a large scale, as they encompass multiple projects. While a single project may sometimes result in substantial GhG emissions, ¹¹⁹ they generally fall within the scope of a broader plan, programme or policy.

There are circumstances, however, where EIA may play an important role in complement to SEA. Even when the principle of a project is often best assessed in a SEA, its modalities are better reviewed within a specific EIA. Thus, an EIA can provide opportunities to ensure that a thermal power plant is built using the most efficient technology, that highly-frequented public venues are located at places easily accessible by public transportation, or that airports are designed in such a way as to reduce the need for airplanes to taxi. In complement to SEA, EIA is an important component of a toolkit on climate change mitigation. This has incidentally been recognized by a number of UNECE Member States, which have integrated consideration for GhG emissions not only in SEAs, but equally in EIAs. 120

5.2 Promoting consistent methodologies

Secondly, the UNECE could provide detailed guidance to ensure that climate change considerations are integrated in EA based on consistent and effective methodologies. Whether at the project or at the strategic level, any given EA only relates to an incremental source of GhG emissions. 121 It is critical that, when deciding on the approval of a proposed activities, environmental authorities be able to compare its global impacts, which are diffuse and imperceptible, with its tangible local benefits. 122 Yet, in many jurisdictions, cumulative effects

¹¹⁸ Thus, the Kiev Protocol (n 40) was adopted by the Meeting of the Parties, even though the Espoo Convention does not contain any precise obligation related to the conduct of SEA. The capacity of the Meeting of the Parties to adopt Protocols is clearly provided in art 11 para 2(g), of the Espoo Convention (n 5) as amended by Amendment to the Convention on Environmental Impact Assessment in a Transboundary Context (adopted 4 June 2004, entered into force 23 October 207) adopted by decision III/7 of the Meeting of the Parties to the Espoo Convention held in Cavtat, Croatia, from 1 to 4 June 2004, 'Second Amendment to the Espoo Convention,' UN Doc ECE/MP.EIA/6 (13 September 2004) 93.

¹¹⁹ For instance, the coal-fired power plant in Prunéřov II, Czech Republic, was estimate to cause 0.021 per cent of global GhG emissions. See generally A Burke, Federated States of Micronesia v Czech Republic: Greenhouse Emissions as Transboundary Pollution (2011) 14 Asia Pacific Journal of Environmental Law 203, 209. A significant share of global GhG emissions could also be attributed to some of the world's largest coal mines if end-use GhG emissions are considered.

¹²⁰ See for instance EU Commission, 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment' (n 76).

¹²¹ Only in a few exceptional cases, such as perhaps the component on power generation of China's successive Five-Year Plans, could a policy be considered to have a more-or-less discernible impact on the climate system as a whole.

¹²² See for instance Center for Biological Diversity v National Highway Traffic Safety Administration, 538 F.3d 1172 para 22 (9th Cir. 2008), where Judge BB Fletcher noted, '[t]he impact of [GhG] emissions

assessment remains among the most enduring methodological challenges to EA.¹²³ Carefully drafted methodological guidance could help various jurisdictions to improve their methodologies.

The need for methodological guidance on climate change and EA has repeatedly been highlighted by the representatives of UNECE Member States. ¹²⁴ The EU and various UNECE Member States have developed and implemented methodological tools, which they have often revised and improved over time. ¹²⁵ Lessons need to be drawn from their experience in order to ensure that EA contains more than a formulaic mention of GhG emissions. A systematic study of national instruments could lead to the drafting of a synthetic guidance document opened for consultations. This process would give a structure to a nascent transnational debate on EA and climate change. The comparative perspective provided by a UNECE synthesis and the ensuing debate would facilitate improvements in State practice, helping those States which already integrate climate change in their EA to improve their procedure to ensure its effectiveness, while encouraging other States to follow.

5.3 Taking the lead of the rest of the world

Thirdly, the UNECE could also be a forum through which developed States promote their experience to the rest of the world. The UNFCCC calls upon developed States to 'take the lead in combating climate change' in application to the principle of common but differentiated responsibilities and respective capabilities. ¹²⁶ This suggests not only that developed States must act first, but also that they should identify effective tools and share their experience with other countries. Any step taken by the UNECE regarding the integration of climate change in EA would be influential not only on UNECE Member States, but also – and, perhaps, overall – on the rest of the world.

The UNECE is not the only forum which could help to promote EA as a tool for climate change mitigation. Advocacy work by the UNEP's advocacy facilitated the diffusion of EA in the 1970s and 1980s; ¹²⁷ today, this institution could help promoting this tool in the context of climate change. The UNFCCC could also play a role, although negotiations under the UNFCCC have often refrained from prescribing particular tools for climate change mitigation, in line with the recognition, in the preamble of the UNFCCC, of the 'sovereignty of States in international cooperation to address climate change.' ¹²⁸ The OECD has shown some interest in the topic. ¹²⁹ The EU Commission has already played a role; ¹³⁰ it could continue to improve guidance documents and to promote its effective implementation at the national level.

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on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.'

¹²³ See e.g. AJ Sinclair, Meinhard Doelle & PN Duinker, 'Looking up, down, and sideways: Reconceiving cumulative effects assessment as a mindset' (2017) 62 *Environmental Impact Assessment Review* 183; J Gunn & BF Noble, 'Conceptual and methodological challenges to integrating SEA and cumulative effects assessment' (2011) 31 *Environmental Impact Assessment Review* 154.

¹²⁴ See *supra* notes 100, 110 and 113.

¹²⁵ See e.g. the guidance documents issued by the EU Commission, cited *supra* note 76.

¹²⁶ UNFCCC (n 6) art 3(1).

¹²⁷ See *supra* note 24.

¹²⁸ UNFCCC (n 6) recital 10.

¹²⁹ OECD Task Team on Climate Change, 'Incorporating climate change impacts and adaptation in EIA: Opportunities and Challenges' (2010).

¹³⁰ See *supra* note 75 and 77.

However, the UNECE stands out as the most promising forum for global leadership in relation to the inclusion of climate change mitigation in EA. Politically, there appears to be a consensus among most UNECE Member States (with the exception of Kazakhstan) about the need to integrate considerations for climate change mitigation in EAs—a consensus which does not extend to non-UNECE Member States. While this does not mean that all UNECE Member States will necessarily support international developments, there is, at least, less likelihood of strong opposition within the UNECE than beyond it. Historically, as documented above, the UNECE has a strong experience in promoting EA as a tool for environmental protection, not just through advocacy work (like the UNEP), but also through the adoption of treaties contributing to developments in customary international law.

Geographically, the UNECE could be a link between the EU – which, although often seen as a global leader, is arguably too small and too homogenous to have a similar influence on the making of international law – and global institutions such as UNEP or the UNFCCC – where a consensus would be more difficult to reach. In its own assessment, the UNECE covers a region which includes 'some of the world's richest countries, as well as countries with a relatively low level of development,' representing a diversity which 'encourages the sharing of experience and knowledge.' A norm formally endorsed by UNECE Member States would thus be more likely to be relevant, beyond a group of developed countries with similar institutions (like the EU), to all countries in the world.

5.4 Desirable initiatives

Further initiatives under the auspices of the UNECE could lead to the adoption of an instrument, whose form and legal nature would inevitably depend on the amount of political support achieved through the process. At the very least, consultations could lead to the adoption of methodological guidance on the inclusion of GhG emissions in EA. Beyond this, it would be desirable for the role of EA as a tool for climate change mitigation to be affirmed in a binding instrument. For instance, an amendment to the Espoo Convention could be adopted by three-fourths of the State Parties, ¹³³ that is, 33 States, ¹³⁴ which a common position of the EU's 28 Member States would be instrumental to achieve. Alternatively, a Protocol could be adopted by consensus, or a distinct treaty adopted by a different coalition of States under the UNECE. Whether it takes the form of an amendment, a protocol or a new treaty, a binding international law instrument recognizing the role of EA as a tool for climate change mitigation could extend greater influence, not only on the domestic law of UNECE Member States, but also, crucially, on the governments of non-UNECE Member States, by dramatically highlighting the emergence of global norm.

In whichever form it is adopted, notwithstanding its binding nature, this instrument would recognize the importance of addressing the contribution of projects to environmental damages of a diffuse and global nature, such as GhG emissions. It could recognize that States – in the UNECE and beyond – have an obligation under general international law to conduct an EA when a project is likely to contribute substantially to global GhG emissions, taking into account the scale of the project and national circumstances. It could also lay basic and consensual rules

¹³¹ See *supra* note 78 and 83.

¹³² UNECE's website, 'Geographical scope' (n.d.) https://www.unece.org/oes/nutshell/region.html.

¹³³ See Espoo Convention (n 5) art 14(3) and (4).

¹³⁴ Based on 44 State Parties, as of 6 June 2018.

regarding the methodology for assessing GhG emissions, assessing significance and organizing consultations and public participation, although it should leave room for methodological innovation, and it could establish a mechanism for the circulation of best practices. Going a step further, this instrument could also establish an institutional framework, such as a registry, through which the activities likely to cause the largest amount of GhG emissions would be notified to the international community, documentation would be circulated, and views could be conveyed by foreign governments or authorized non-State actors. ¹³⁵ In one way or another, this instrument would facilitate the diffusion of EA as a tool for climate change mitigation to more countries as well as its acceptation as law.

6 Conclusion

Discussions on EA as a tool for climate change mitigation have taken place in numerous UNECE Member States and, to some extent, under the auspices of the UNECE. The desirable outcome of these discussions is the adoption of an international instrument, which could take the form of a treaty and may contain institutional provisions. While the nature and content of this instrument will be of some importance, it is perhaps its mere existence which will be most impactful on UNECE Member States and beyond, as a clear recognition that EA is relevant in the context of climate change, able to help national authorities in taking better decisions, and, consequently, indispensable as part of multifaceted national efforts to reduce and cease GhG emissions.

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¹³⁵ Precedents for such mechanisms can be found in UNCLOS (n 49) art 205 and Protocol on Environmental Protection to the Antarctic Treaty (n 51) Annex I art 3.4.