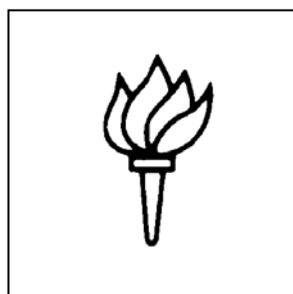


NEW YORK UNIVERSITY SCHOOL OF LAW

LAW & ECONOMICS RESEARCH PAPER SERIES
WORKING PAPER NO. 19-38



Cities as Global Environmental Actors: The Case of Marine Plastics

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September 2019

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Abstract

As the impacts of marine plastic pollution become ever more apparent, a number of states have begun calling for the development of a new international agreement to address the problem. This essay considers which jurisdictional entities should be engaged in the drafting of such an agreement if one should materialize. While nation states have traditionally been the main entities recognized as having the legal personality to make treaties, cities have the potential to substantially advance efforts to mitigate certain international environmental problems, including the plague of global marine plastic pollution. We argue, on functional grounds, that this potential should be acknowledged, indeed encouraged, by engaging cities in the development of international action to address these problems. In particular, we suggest a “city supplement” to international agreements dealing with environmental problems where there are functional reasons for involving cities.

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This essay was first prepared for a conference organized by Karen Bradshaw, Billy Christmas, and Dean Lueck in April 2019. The conference extended the ideas in Karen Bradshaw Schulz & Dean Lueck, *Contracting for Control of Landscape-Level Resources*, 100 IOWA L. REV. 2507 (2015). The essay benefitted tremendously from thinking about international treaty-making within Bradshaw & Lueck’s functional approach to contracting to address environmental problems in the domestic context, and from comments received at the conference, especially from Yael Lifshitz-Goldberg. Adalene Minelli, Sara Savarani, Richard Stewart, and Grace Soutter provided helpful comments and assistance. Bryce Rudyk generously encouraged the authors to consider the potential to involve cities in addressing international environmental problems such as marine plastics.

Introduction

At the annual meeting of the United Nations Environment Assembly (UNEA) in Nairobi, Kenya this past spring, plastics were high on the agenda. In fact, with the impacts of marine plastic pollution growing more apparent by the day, a number of states expressed hope that the UNEA meeting would lay the groundwork for a new international treaty to tackle the problem.¹ The results of the meeting ultimately fell short of these expectations, but the idea of an international agreement on plastics could be revived at a later date. The question this essay asks is, who should be engaged in the drafting of such an agreement if it is revived?

Traditionally, nation states have been the main entities recognized as having the legal personality to make treaties.² Thus international environmental treaties, such as the Paris Agreement on climate change, are between nation states. However, effectively addressing international environmental problems often requires coordinated action by more than just national governments because no single authority has jurisdiction to control all of the elements that contribute to the problem. Climate change is a prominent contemporary example as reducing greenhouse gas emissions will require coordinated actions by nation states as well as individuals, corporations and governments within those states if the problem is to be addressed expeditiously. Plastics present another example. Many of the plastics polluting the oceans come result from land-based activities and improper disposal.³ And because cities have historically been heavily involved in managing waste, cities could materially help (or hinder) international efforts to reduce plastic pollution.

¹ Laura Parker, *The World Agrees There's a Plastic Waste Crisis – Can it Agree on the Solution?* NAT'L GEO. (March 25, 2019).

² JAMES R. CRAWFORD, *BROWNIE'S PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 115 (8th ed. 2012).

³ Jenna R. Jambeck et al., *Plastic Waste Inputs from Land into the Ocean*, 347 *SCIENCE* 768, 768 (2015).

Our chief concern in this essay is to suggest that the international community actively encourage cities' participation in addressing international environmental problems where cities are well-positioned to do so.⁴ In particular, we suggest a "city supplement" to international agreements dealing with environmental problems such as marine plastic pollution where there are functional reasons for involving cities; such a supplement could be negotiated by nation states, and open to cities to sign. Who should be included in international environmental governance is necessarily context-specific, because who is well-positioned to address a problem is contingent on the circumstances. But as a matter of general principle, nations should give serious consideration to the role that non-state actors, including cities, can play in mitigating a given environmental problem before deciding the class of entities that are engaged in devising a solution.

I. The Status Quo: Nation-States Mainly Make Treaties

As a formal matter, subnational actors, including local governments, have long been marginalized under international law. Scholars trace the primacy of states in international law to the dawn of the Westphalian system, which considered states to be the unitary sovereigns of the

⁴ We are not the first to propose including subnational actors in international efforts to address transboundary environmental problems; there has been considerable interests in involving subnational actors in efforts to limit climate change in particular. For example, extending the Non-State Actor Zone for Climate Action, Daniel Esty and Dena Adler have proposed that international climate change law expand to include non-state actors, perhaps by crafting annexes that such actors could sign. Daniel C. Esty & Dena P. Adler, *Changing International Law For A Changing Climate*, 112 *AJIL UNBOUND* 279, 281–82 (2018); see also Sharmila Murthy, *States and Cities as 'Norm Sustainers': A Role for Subnational Actors in Paris Agreement on Climate Change*, 37 *VIRGINIA ENVTL. L.J.* 1, 33–34 (2019); GLOBAL CLIMATE ACTION, <https://climateaction.unfccc.int/> (last visited July 15, 2019). Our principal contributions lie in focusing on the benefits of including cities (as opposed to other subnational actors) in addressing international environmental problems, emphasizing the functional arguments for broadening participation beyond nation states to include cities, and identifying marine plastics pollution as a problem that would benefit specifically from the involvement of cities. Others, including Peter Spiro, have made similar functional arguments for expanding opportunities for subnational actors to participate in international law making generally. See *New Players on the International Stage*, 2 *HOFSTRA L. & POL'Y SYMP.* 19 (1997) [hereinafter Spiro, *New Players*].

territories that they occupy and the “sole bearers of international rights and duties.”⁵ From the time of the signing of the Treaty of Westphalia in 1648 until the middle of the twentieth century, the notion of unitary state sovereignty dominated and states were the only entities universally acknowledged to possess international legal personality.⁶ The primacy of states’ status under international law resulted in part from the efforts of German and Italian jurists in the late nineteenth century who sought to bolster the supremacy of the national governments in their newly unified nations;⁷ granting special status to the central government necessarily reduced the standing of the provincial territories in the fledging states and therefore helped aggrandize, or even legitimize, the central governments.⁸ Practically speaking, the fact that only states possessed full international legal personality meant that states were the only entities that were capable of creating international law through treaties.⁹

In 1949, the International Court of Justice took a significant step towards expanding the class of entities eligible to possess legal personality when it held that the United Nations possessed legal personality to bring legal claims.¹⁰ The Court’s decision was still rooted in state consent; the Court based its finding on the fact that the UN would not be able to “carry out the intentions of its founders if was devoid of international personality.”¹¹ Thus, the decision to grant the UN personality did not challenge the statist conception of international law.¹² Moreover, the Court

⁵ See, e.g., Yishai Blank, *Localism in the New Global Order*, 47 HARV. INT’L L. REV. 264, 265 (2006) (citing Kanishka Jarasuriya, *Globalization, Law, and the Transformation of Sovereignty: The Emergence of Global Regulatory Governance*, 6 IND. J. GLOBAL LEGAL STUD. 425, 425 (1999)).

⁶ See James E. Hickey, Jr., *The Source of International Legal Personality in the 21st Century*, 2 HOFSTRA L. & POL’Y SYMP. 1, 3 (1997).

⁷ See ROLAND PORTMANN, *LEGAL PERSONALITY IN INTERNATIONAL LAW* 42–52 (2010).

⁸ *Id.* at 52.

⁹ *Id.* at 8.

¹⁰ *Reparation for Injuries Suffered in the Services of the United Nations*, Advisory Opinion, 1949 I.C.J. Rep. 174 (Apr. 11) [hereinafter *Reparation Opinion*].

¹¹ *Id.* at 179.

¹² Hickey, *supra* note 6, at 6.

emphasized that the fact that the UN possessed some degree of international personality was “not the same thing as saying [...] that its legal personality and rights and duties are the same as those of a State.”¹³ In other words, while the UN possessed enough legal personality to bring certain legal claims, its personality was not coterminous with States’.

The development of human rights protections regulating the behavior of nation-states toward their citizens broadened the concerns of international law after World War II and put further pressure on the state-centrism of international law.¹⁴ These pressures intensified in the late twentieth century, following the collapse of the Soviet Union, as states became increasingly integrated into a global economy and the global regulatory regime proliferated.¹⁵ The establishment of the World Trade Organization (WTO) in 1994, which heralded new agreements on agriculture, services and intellectual property, marked a particularly significant development in this respect. Not only did these agreements regulate new segments of the member states’ economies, but the WTO’s Dispute Settlement Body was, for the first time, given compulsory jurisdiction over all disputes arising out of the covered agreements.¹⁶ As more activities within states’ borders became subject to regulation by outside institutions such as the WTO, the idea that states are the unitary sovereigns of their territories became increasingly suspect.¹⁷

¹³ Reparation Opinion, *supra* note 10, at 179.

¹⁴ S. JAMES ANAYA, *INDIGENOUS PEOPLES IN INTERNATIONAL LAW* 52 (2d ed. 2004). However, to the extent that human rights protections emerged from treaties and other instruments agreed to by nation-states, they reflected the state-centrism of international law. Philip Alston, *Does the Past Matter On the Origins of Human Rights*, 146 *HARV. L. REV.* 2043, 2072 (2013) (reviewing JENNY S. MARTINEZ, *THE SLAVE TRADE AND THE ORIGINS OF INTERNATIONAL HUMAN RIGHTS LAW* (2012)).

¹⁵ On the diminution of states’ unitary sovereignty, see Kanishka Jayasuriya, *Globalization Law, and the Transformation of Sovereignty: The Emergence of Global Regulatory Governance*, 6 *IND. J. GLOBAL LEGAL STUD.* 424, 434 (1999).

¹⁶ JOHN H. JACKSON, *SOVEREIGNTY, THE WTO AND THE CHANGING FUNDAMENTALS OF INTERNATIONAL LAW* 6 (2006).

¹⁷ *See id.* at 6, 8.

The ascendance of non-governmental organizations (NGOs), which began to play increasingly important roles in diplomatic efforts and international adjudicatory processes towards the end of the 20th century,¹⁸ further blurred the line between state and non-state activities and posed new challenges to the idea of Westphalian sovereignty.¹⁹ The NGOs that rose to prominence during this era represented a multitude of interest groups and peoples and their impact on the development of international law was so considerable that by 2004, the authors of a treatise on international environmental law surmised that, “[t]oday, purely inter-state development of norms is probably non-existent in most fields of international law.”²⁰

Notably, subnational governments emerged as significant actors in the post-Cold War global regulatory regime as well. Writing over a decade ago, Yishai Blank observed that local governments were in the midst of transitioning from “mere subdivisions” of states to objects of regulation and “vehicles for disseminating and implementing global political programs, financial schemes and governance strategies.”²¹ Local governments appear to have only increased their international activities in the time since.²²

Cities have taken a particularly active role in the development of international environmental climate policy and have participated in the development of the relevant instruments. For instance, a number of local government organizations have been granted Observer Status to the United Nations Framework Convention on Climate Change (“UNFCCC”) so that they can attend the

¹⁸ Steve Charnovitz, *Nongovernmental Organizations and International Law*, 100 AM. J. INT’L L. 348, 353 (1996).

¹⁹ Jackson, *supra* note 16, at 11–14.

²⁰ ALEXANDRE KISS & DINAH SHELTON, *INTERNATIONAL ENVIRONMENTAL LAW* 167 (3d ed. 2004).

²¹ Blank, *supra* note 5, at 263–64.

²² Christian Lequesne & Stéphanie Paquin, *Federalism, Paradiplomacy and Foreign Policy: A Case of Mutual Neglect*, 22 INT’L NEGOT. 183, 190 (2017).

Conferences of the Parties.²³ State and local governments from across the globe have also signed a memorandum of understanding pledging to limit emissions to 80-95% below 1990 levels²⁴ and formed a variety of international coalitions such as the C40 network to share technological knowledge regarding climate change mitigation and adaptation.²⁵ The diplomatic efforts of local and state governments that complement – or in some cases obstruct – those of central governments have been labelled “paradiplomacy.”²⁶

However, while subnational actors have become key actors in the functioning of the global legal order, formally, state consent is still the basis for international legal personality.²⁷ There have been calls to extend this privilege to other entities over the years. Perhaps most prominently, various commentators have called for granting legal personality to NGOs. These arguments take different forms, but a common theme is that international NGOs, which have members from across the globe, reflect a certain “global consciousness,” and are therefore able to transcend the narrow self-interest to which states abide and positively influence the development of international law.²⁸ This influence should be encouraged and “legitimized” through formal recognition, the argument

²³ By our count, there are 40 entities among the list of NGOs that have been granted observer status to the UNFCCC that are classified as “local governments” or “municipal authorities.”

²⁴ UNDER2, *The Under2 MOU*, <https://www.under2coalition.org/under2-mou> (last visited Apr. 3, 2019).

²⁵ C40 CITIES, *Programmes*, <https://www.c40.org/programmes> (last visited Apr. 3, 2019); Lequesne & Paquin, *supra* note 22, at 198. Some observers are skeptical of the potential of nonstate actors to address climate change and sustainable development. See, e.g., Cinnamon P. Carlarne, *Symposium on Climate Change Localism*, 112 AJIL UNBOUND 285 (2018); Sander Chan et al., *Promises and Risks of Nonstate Action In Climate and Sustainability Governance*, 10 WIREs CLIMATE CHANGE (2019); Ileana Porras, *The City and International Law: In Pursuit of Sustainable Development*, 36 FORDHAM URB. L.J. 537 (2009).

²⁶ See, e.g., Lequesne & Paquin, *supra* note 22, at 188; RODRIGO TAVARES, PARADIPLMACY: CITIES AND STATES AS GLOBAL PLAYERS 1, 7–9 (2016).

²⁷ Yishai Blank, *The City and the World*, 44 COLUM. J. TRANSNAT’L L. 868, 892 (2006). For an analysis of the concept of international legal personality that addresses more nuances than discussed here, see Portmann, *supra* note 7.

²⁸ Hans Holmén & Magnus Jirstrom, *Look Who’s Talking! Second Thoughts about NGOs as Representing Civil Society*, 44 J. ASIAN & AFR. STUD. 429, 430 (2009). See also James A. Paul, *NGOS and Global Policy-Making*, GLOBAL POL’Y FORUM (June 2000), <https://www.globalpolicy.org/empire/31611-ngos-and-global-policy-making.html> (quoting Kofi Anan as stating that NGOs are the “conscience of humanity”).

goes.²⁹ While such arguments may hold a certain cosmopolitan appeal, states have generally been wary of granting personality to NGOs because they fear that doing so would diminish government control over them.³⁰ Some scholars also worry that NGOs lack the democratic legitimacy to justify an expanded role in global governance.³¹ Moreover, granting NGOs international legal personality might exacerbate the disadvantages of developing countries in international settings, as NGOs may be more likely to take positions that align with those of developed countries.³² As a result of these objections, nation states remain the only entities that are universally acknowledged to possess international legal personality³³ and states are the principal entities making international treaties.³⁴

Even in federal systems such as Canada or the United States, where jurisdiction is divided between national and subnational entities, it is generally the federal government alone that makes treaties with other nation states; the fact that state or local governments may need to assist their federal governments in implementing the treaty obligations by adopting new laws or programs does not augment their status under international law.³⁵ For instance, while local governments have traditionally been responsible for the management of non-hazardous solid wastes in the

²⁹ Rephael Ben-Ari, *The International Legal Status of International Non-Governmental Organizations: The Century-Long Normative Debate and its Future Prospects*, 23 *CARDOZO J. INT'L & COMP. L.* 1, 4 (2014).

³⁰ Charnovitz, *supra* note 18, at 357.

³¹ See e.g., Holmén & Jirstrom, *supra* note 28, at 436; Ben-Ari, *supra* note 28, at 3.

³² Helmut Philipp Aust, *Shining Cities on the Hill? The Global City, Climate Change, and International Law*, 26 *EUROPEAN J. INT'L L.* 255, 276–77 (2015).

³³ PORTMANN, *supra* note 7, at 1 (“There is almost universal agreement that states are international persons.”); Charnovitz, *supra* note 18, at 355 (“In general, an NGO enjoys legal personality only in municipal law, not in international law.”).

³⁴ Crawford, *supra* note 2, at 369–70.

³⁵ Perhaps “40% of the world’s population now lives in a country with a federal type of system.” Lequesne & Paquin, *supra* note 22, at 184.

Some federations, such as Germany or the United States, allow their länder or states to make treaties, with approval from the federal level. TAVARES, *supra* note 26, at 73; Brownlie, *supra* note 2, at 117. Distinctively, Belgium’s constitution allows its regions to make treaties in areas of their competence *without* national approval. Belgium is the only country whose regions “have treaty-making capacity under international law.” TAVARES, *supra* note 26, at 64. There is no indication that local governments have been recognized as enjoying comparable authority to subnational states to make international treaties, although there are examples of cities from different countries making agreements to manage shared water resources. Blank, *supra* note 27, at 904, 906.

United States,³⁶ which means that local governments would be likely to be called upon to assist with the implementation of any future international treaty concerning waste management, local governments would not, under the current law, be permitted to join such a treaty.³⁷

Our central argument in this essay is that there are some instances in which, from a functional perspective, it seems appropriate to permit local governments to join international environmental agreements. In the section below we review these functional arguments for granting cities greater participatory rights and suggest a framework for determining those classes of environmental problems in which cities' participation is most appropriate.

II. Functional Arguments

Functional Arguments for State-Centrism

Before identifying the functional arguments for including cities in addressing some international environmental problems, it is worth noting some of the functional benefits of the status quo, under which states have a virtual monopoly on making treaties. State-centrism has obvious attractions for nation-states as it affirms that they are the sole voice of the country; other countries are not permitted to deal with subnational units within the boundaries of the nation-state without its approval.³⁸ Domestic law may reaffirm the nation state's dominance, as in the U.S. where subnational units are prohibited for engaging in foreign affairs.³⁹

³⁶ *United Haulers Ass'n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 354 (2007).

³⁷ Yishai Blank has highlighted a similar tension. Blank, *supra* note 5, at 266.

³⁸ Gerald E. Frug & David J. Barron, *International Local Government Law*, 38 *URB. LAW.* 1, 16 (2006).

³⁹ *Id.* at 13 n.49; *see also* *Gingery v. City of Glendale*, 831 F.3d 1222, 1228 (9th Cir. 2016). On the other hand, Belgium allocates to its regions "exclusive responsibility for the international projection of internal constitutional provisions," which include the environment. Lequesne & Paquin, *supra* note 22, at 195; TAVARES, *supra* note 26, at 8, 14. While other countries grant subnational governments some foreign affairs powers, "Belgium goes further than any other country." Lequesne & Paquin, *supra* note 22, at 195.

State-centrism has other benefits as well. For one, it limits the number of parties whose consent is required to conclude a treaty and may therefore ease the negotiation of such agreements.⁴⁰ The transaction costs of over 190 countries negotiating an agreement are likely lower than the costs that would be involved if other levels of government were entitled to negotiate an agreement. The state monopoly on international treaty-making assigns to nation-states the role of coordinating the subnational interests within their territory. This coordination benefits other states: each state aggregates the positions of interests groups – including local governments – within its territory and presents a unified position on the international stage to which the other nations can respond.⁴¹ The nation-state’s monopoly at the international level not only reduces the number of parties whose consent is required, but also reduces the difficulty that each nation state faces defining its position internally. The fact that the national government speaks for the country as a whole avoids the paralysis that might result if multiple governments covering the same territory (such as cities, provinces, and the national government) had to bargain with each other before, or in conjunction with, negotiating with other countries.⁴²

The state monopoly also may facilitate enforcement of any international agreement that is negotiated. Under international law, the state is responsible for the actions of the subnational governments within it (unless they are acting *ultra vires*).⁴³ This makes it easier for other states to enforce agreements, as the state is held vicariously liable for the actions of its subunits.⁴⁴ From cities’ perspective, , the state responsibility doctrine is a double-edged sword. On the one hand it

⁴⁰ See also Frug & Barron, *supra* note 38, at 20 (citing Peter Spiro, *Globalization and the (Foreign Affairs) Constitution*, 63 OHIO ST. L.J. 649, 668 (2002)).

⁴¹ Lequesne & Paquin, *supra* note 22, at 196 (referring consultations undertaken by the national government with subnational governments in “India, Argentina, South Africa, Canada, Spain, Belgium and Germany”).

⁴² *Id.* at 195.

⁴³ Frug & Barron, *supra* note 38, at 19. See also *id.* at 38.

⁴⁴ *Id.* at 19.

shields cities from having to defend themselves against charges that they have violated international law in costly forums such as international arbitration. But on the other, state responsibility may induce national governments to take greater interest in local affairs in order to reduce the national government's exposure to liability.⁴⁵

Functional Arguments for Including Cities

Underlying the idea that nation-states speak for subnational governments in international law is an assumption that nation-states control these subnational units. But as Professor Peter Spiro has argued, national governments may not be able to “easily cow” subnational governments.⁴⁶ There may be constitutional constraints on national governments' authority to require subnational governments to implement international agreements agreed to by the national governments.⁴⁷ Moreover, even if the national government can legally compel the subnational governments to follow the agreements, the national government may be reluctant to do so for political reasons.⁴⁸ It also may lack the capacity to ensure that a multitude of subnational governments are faithfully executing the terms of the international agreement because of the costs of monitoring multiple subnational governments. In short, the potential for slippage provides an initial argument for involving subnational governments, including cities, in negotiating

⁴⁵ Frug & Barron, *supra* note 38, at 38 (“Some states have suggested that international agreements enable national governments to justify greater supervision of local policymaking than domestic politics alone would permit. At the very least, many nation-states, such as Canada, seem to be taking local compliance quite seriously.”).

⁴⁶ Spiro, *New Players*, *supra* note 4, at 36.

⁴⁷ Frug & Barron, *supra* note 38. *See also* Aust, *supra* note 32, at 267.

⁴⁸ Spiro, *New Players*, *supra* note 46, at 35–36.

international agreements, especially in areas where the cooperation of subnational governments will be helpful in implementing the agreements.

Indeed, a second, related argument for involving cities in negotiating some international agreements is that local governments may be well-placed to assist in implementing the agreement. For example, they may have built up physical or regulatory infrastructure that, with adjustments, could be used to achieve the desired environmental improvement.⁴⁹ It is in this circumstance that the difficulty that national governments have cowing subnational governments will be most problematic. Functions often performed by local governments include providing drinking water to their populations, regulating the siting and the design of buildings, operating mass transit systems and roads, and waste management. When an agreement touches on traditional areas of local government responsibility it may be particularly valuable to include local governments in negotiating it. If they are involved upfront, they may be more likely to help implement the agreement, which may lower the cost of achieving the objective. Local governments also might help shape the agreement to facilitate implementation, given their knowledge of local implementation capacity.

A third reason for including cities in international negotiations is that such negotiations can help construct norms to address the environmental problem. The constructivist school of international relations characterizes international legal practices, including treaty negotiations, as a means of socializing actors to advance ideas and alter conceptions of self-interest.⁵⁰ By participating in international negotiations, city officials may be exposed to ideas and approaches

⁴⁹ The local contribution to environmental problems and addressing them is well-recognized. See for example Agenda 21, adopted at the United Nations Conference on Environment and Development in 1992. Agenda 21, ch. 28, sec. 1, excerpted in Frug & Barron, *supra* note 38, at 27.

⁵⁰ Janne E. Nijman applies constructivism to explain how cities can be socialized through participation in international institutions. Janne E. Nijman, *supra* note 21.

that they take back to their jurisdictions. Thus, involving cities, along with nation-states in international negotiations may help to construct the political momentum necessary to encourage local action. Because they are the level of government “closest to the people,” bringing on board local governments may be especially helpful in changing norms within society.⁵¹ The history of U.S. environmental law suggests that local governments often identify and try to address environmental problems before higher levels of government.⁵² For example, local governments imposed fees on single use bags in New York State before the momentum developed to ban plastic bags at the state level.⁵³

In sum, we offer three functional arguments for including cities in negotiations to address international environmental problems: the slippage argument that nation-states cannot always force local governments to implement international agreements, the infrastructure argument that cities control physical installations and regulatory apparatus that will be useful to address certain problems, and the constructivist argument that socializing cities through negotiations may create momentum for addressing problems. These three arguments suggest that there are certain kinds of international environmental problems in which it would be helpful to engage cities in resolving. These are problems where cities control the systems that need to be adapted to address the problem, where national governments cannot easily mandate that local governments alter these systems, and where local actions might be helpful in constructing norms supportive of addressing the problems.

⁵¹ Agenda 21, ch. 28, excerpted in Frug & Barron, *supra* note 38, at 27.

⁵² See Katrina M. Wyman & Danielle Spiegel-Feld, *The Urban Environmental Renaissance*, CALIFORNIA L. REV. (forthcoming 2020).

⁵³ Jesse McKinley, *Plastic Bags to Be Banned in New York; Second Statewide Ban, After California*, N.Y. TIMES (Mar. 28, 2019), <https://www.nytimes.com/2019/03/28/nyregion/plastic-bag-ban-.html?action=click&module=Latest&pgtype=Homepage>.

Some Practicalities

Even a reader convinced that there is a functional case for including cities in international negotiations might wonder about the practicalities of doing so given the large number of local governments around the world. In other words, might the costs of including cities overwhelm the benefits? We suggest that the concerns about the costs of allowing cities to participate might be mitigated through the design of the process in which cities are allowed to participate. In particular, we favor enabling cities to participate in international efforts by allowing them to sign a “city supplement” to an agreement between nation states. This approach would preserve the benefits of nation-states negotiating on behalf of the diverse interests within their territory, while providing an opportunity to socialize cities into environmental awareness, and encouraging them to assist with implementation.

The most formal way of including cities in international processes would be to grant them international legal personality and allow them to sign treaties. This is unlikely to occur as a political matter given the virtual monopoly of nation-states on international legal personality. In any event, the benefits of extending international legal personality are likely outweighed by the negative consequences of enlarging the number of players beyond any that could feasibly reach an agreement under a rule of consensus.

Thus, instead of extending international legal personality to cities to enable them to formally make treaties, cities, or organizations of cities, should be granted observer status in international negotiations, and/or included in national delegations.⁵⁴ In addition, where there are

⁵⁴ Although provincial officials participate in national delegations in some countries such as Canada, “many countries are reluctant to include regional and municipal representatives in their national delegations” for international processes. Lequesne & Paquin, *supra* note 22, at 191, 198.

functional reasons for including cities, the treaties that nation-states develop should include a supplemental agreement that cities could sign.⁵⁵ Nation-states might elaborate the terms of this supplemental agreement, in consultation with representatives of cities or organizations of cities. Cities would have the option of signing the supplement, which could include commitments by cities to address the environmental problem, and requirements to report progress to a public clearinghouse to promote accountability. To our knowledge, no international agreement among nation-states has ever included such a supplemental agreement. This “city supplement” likely would not count as a treaty under international law because local governments do not have legal personality to make treaties under international law in the absence of national consent;⁵⁶ the supplement could even clarify that it is not a treaty to give nation-states comfort.⁵⁷ Many of the functional benefits of involving cities likely would still be realized by involving them in a high profile treaty-making process that includes a supplement that they could sign without it counting as a treaty under international law. In addition, the national role in designing the supplement might encourage nation states to allocate resources to promoting compliance with the supplement by cities that seek to join.

To be sure, cities can be involved in addressing international environmental problems without participating in international negotiations between nation-states and, as noted in Part I, cities have begun to pursue such options.⁵⁸ For example, cities themselves have formed

⁵⁵ See also Esty & Adler, *supra* note 4, at 281 (recommending that Conference of Parties to the Paris Agreement create annex or amendment that non-state actors such as mayors could sign to indicate they will use their “authority” to achieve the Paris Agreement goals).

⁵⁶ Blank, *supra* note 27, at 906, 892.

⁵⁷ See Esty & Adler, *supra* note 4, at 283 (recommending clarification of the limited implications of subnational endorsement of Paris Agreement). For the argument that subnational units could potentially create treaties that would be recognized as international law with national consent, see *id.* at 282; TAVARES, *supra* note 26, at 64.

⁵⁸ See *supra* note 24 and 25 with accompanying text.

organizations, or networks, to share information and make political declarations to address climate change.⁵⁹ Subject to domestic constitutional rules limiting the authority of cities to engage in foreign affairs, cities also might seek to formally contract among themselves to address environmental problems, and agree to international arbitration in the event of disputes between the contracting cities about compliance.⁶⁰ However, the further removed that cities are from international negotiations involving nation states, the less benefit there may be of involving cities, as some of benefits likely stem from being involved in high-profile international negotiations between nation states. For example, if international negotiations are a means of constructing norms, then socialization might be most likely to occur when the most powerful actors – nation-states – are discussing the norms. Moreover, cities might be more likely to abide by agreements that they make under national auspices as nation-states might have the incentives and resources to promote compliance. Thus, there are distinctive benefits to directly engaging cities in inter-state efforts to resolve environmental problems, and providing cities with the opportunity to sign a city supplement to an interstate agreement.

Why Cities in Particular?

The reader might be wondering why we focus on including cities in international environmental negotiations, given that functional arguments also might be made for including other subnational governments, such as states or provinces in federations, corporations or NGOs.

⁵⁹ For discussion of international networks of cities, see, e.g., Esty & Adler, *supra* note 4, at 280, 282 (discussing “arrangements” between non-state actors, including cities, to address climate change).

⁶⁰ This kind of initiative might be legally vulnerable under domestic constitutional rules, such as the Compact Clause or the Commerce Clause in the United States. See Esty & Adler, *supra* note 4, at 283 (suggesting that a “political commitment” is more likely legally viable in the United States).

We focus on giving cities a greater role mainly because many cities have a stronger claim to “democratic legitimacy” than other nonstate actors.⁶¹ It is difficult to generalize about local government because it takes many forms around the world. However, residents of cities often have an opportunity to vote for leading city officials, as “the vast majority of cities around the world ... are governed by officials elected through a democratic process.”⁶² Moreover, cities often provide opportunities for the public to directly engage in governance because of their relatively small size (compared to nation states and other intermediate forms of government such as states).⁶³ Residents may be able to attend and participate in city meetings held in their communities, and not merely participate in decision-making indirectly through elected representatives. In contrast, NGOs and corporations are usually private entities controlled by a discreet group of individuals that is unlikely to be representative of the public at large; unlike cities, NGOs and corporations typically have no obligation to involve the public at large in their internal decision-making.⁶⁴ It is important not to gloss over democratic deficiencies at the local level – voter turnout may be low in municipal elections, municipal policy-making may be dominated by wealthy special interests, and local decision-making might have undesirable consequences for locally disfavored groups.⁶⁵ Yet there is little doubt that they represent a broader amalgam of interests than NGOs or corporations.

In a federation, states, provinces or länder also may provide opportunities to participate in governance. Participation may be less direct than at the local level – the larger scale of these

⁶¹ Porras, *supra* note 25, at 597.

⁶² *Id.* at 558, 558 n.82 (citing Blank, *supra* note 27, at 936).

⁶³ Gerald E. Frug, *The City as a Legal Concept*, 93 HARV. L. REV. 1057, 1069, 1072, 1096, 1106 (1982). Frug describes states as “intermediate” levels of government between local and national governments in the U.S. *Id.* at 1105 n.188.

⁶⁴ *See also* Porras, *supra* note 25, at 539.

⁶⁵ *Id.* at 550, 566, 583–85, 590–91, 597–99.

jurisdictions means that participation is more likely to be through elected representatives, not direct participation in meetings or the like – but there are still opportunities for people to vote for officials at this intermediate level of government and to provide input in decision-making.⁶⁶ Thus, sometimes intermediate levels of government in federations may have an equal democratic claim to cities to participation in international environmental agreements, and a “subnational government supplement” might sometimes be preferable to a “city supplement” to an international environmental agreement.⁶⁷ We focus on the arguments for including cities in international efforts to address environmental problems because the potential for intermediate levels of government such as states and provinces to play an innovative role in environmental protection is reasonably widely discussed in the United States, while the potential for cities to innovate in the environmental realm tends to be less commented upon.⁶⁸ Also, cities may be more inclined to address international environmental problems than the larger jurisdictions in which they reside, as urbanites often are more supportive of robust environmental action than inhabitants of rural areas.⁶⁹

III. Case Study: The Role of Cities in Controlling Marine Plastics Pollution

Marine plastic pollution is an illustrative example of an international environmental problem that might best be addressed if cities, and not just nation states, are engaged in developing

⁶⁶ See also Frug, *supra* note 63, at 1069, 1069 n.41.

⁶⁷ See Esty & Adler, *supra* note 4 (proposing to allow various subnational actors, including states, to signal commitment to the Paris Agreement). See also Murthy, *supra* note 4, at 6 (contrasting states and local governments with other “non-state actors”).

⁶⁸ Wyman & Spiegel-Feld, *supra* note 52 (referring to the lack of scholarly attention to the municipal role in domestic environmental law in the United States); Blank, *supra* note 27, at 890 (cities have been overlooked in the literature on the decline of classical state sovereignty). *But see* Judith Resnik et al., *Ratifying Kyoto at the Local Level: Sovereignism, Federalism, and Translocal Organizations of Government Actors*, 50 ARIZONA L. REV. 709 (2008) (discussing the role of networks of cities and states in international climate change law); Jonathan Rosenbloom, *Local Governments and Global Commons*, 204 B.Y.U. L. REV. 1489 (2014).

⁶⁹ Rahsaan Maxwell, *Why are Urban and Rural Areas So Politically Divided?*, WASHINGTON POST (Mar. 5, 2019), https://www.washingtonpost.com/politics/2019/03/05/why-are-urban-rural-areas-so-politically-divided/?utm_term=.7a185fc6e7e4.

a solution. It is difficult to overstate the magnitude of plastic pollution in the oceans or its effects on marine life. In 2010 alone, as much as 13 million metric tons of plastics entered the ocean and this annual amount is expected to double by 2025.⁷⁰ Due to the deluge, plastics are now ubiquitous in the world's oceans and seas; they are found in every corner of seas, even in waters that are far from human populations.⁷¹ Almost half of plastics in the oceans likely come from four countries – China, Indonesia, the Philippines and Vietnam⁷² – yet even places with robust waste management systems, such as the United States, contribute to marine plastics pollution through the “accidental[] loss or intentional litter[ing]” of plastics – like the plastic bags and wrappers blown by the wind – and through tiny microplastics that enter the oceans through runoff and stormwater.⁷³

Plastic pollution imposes diverse costs. For instance, tourism, aquaculture, and navigation have all been shown to be negatively impacted.⁷⁴ But it is marine animals that have suffered the most serious harms. Plastics do not biodegrade in the oceans; they simply breakdown into smaller pieces, which fish, shellfish and marine mammals often mistake for food.⁷⁵ And because plastics cannot breakdown in the animals' guts either, their bellies start to fill with waste, creating a false sense of fullness as the animals slowly starve to death.⁷⁶ This horrible chain of events was thrown in sharp relief this spring when a whale washed on to the beaches of Philippines with “88 pounds

⁷⁰ Jambeck et al., *supra* note 3.

⁷¹ Marcus Haward, *Plastic Pollution of the World's Seas and Oceans as a Contemporary Challenge in Ocean Governance*, 9 NATURE COMM. 667 (2018).

⁷² Karen Lavender Law, Ph.D., Research Professor of Oceanography, Sea Education Association, Woods Hole, Massachusetts, Written Testimony Before the U.S. Senate Committee on Environment and Public Works, September 26, 2018, at text accompanying note 14 (citing Jambeck et al., *supra* note 3).

⁷³ *Id.*

⁷⁴ Patricia Vallarrubia-Gomez, *Marine Plastic Pollution as a Planetary Boundary Threat—The Drifting Piece in the Sustainability Puzzle*, 96 MARINE POL'Y 213, 213 (2018).

⁷⁵ Elizabeth Royte, *We Know Plastic is Harming Marine Life. What About Us?*, NAT'L GEOGRAPHIC (June 2018), <https://www.nationalgeographic.com/magazine/2018/06/plastic-planet-health-pollution-waste-microplastics/>.

⁷⁶ Daniel Victor, *Dead Whale Found with 8 Pounds of Plastic Inside Body in the Philippines*, NY TIMES (Mar. 18, 2019), <https://www.nytimes.com/2019/03/18/world/asia/whale-plastics-philippines.html>.

of plastic trash inside its body.”⁷⁷ Plastics may ultimately affect human health too because when we eat species that have ingested plastics the plastic ends up in our bodies.⁷⁸ In fact, a recent study that examined stool from individuals from Finland, Italy, Japan, the Netherlands, Russia, the United Kingdom, and Austria found microplastics in every sample.⁷⁹ Scientists do not fully understand the impact that consuming plastics has on human health.⁸⁰

Recognizing their collective responsibility, jurisdictions around the globe, including cities, states and even the European Union,⁸¹ have passed legislation to control plastic waste. In the United States, local governments have dominated this movement. For instance, as of September 2018, well over 150 local governments, including major cities like Chicago and Los Angeles, had passed measures that banned or taxed plastic bags.⁸² Yet, as our colleagues Bryce Rudyk and Sara Savarani have observed, the problem of marine plastic pollution is a collective action problem and solving it effectively will require coordinated global action.⁸³ And, at present, there is no international legal framework in place that comprehensively addresses plastic pollution.⁸⁴ There is, however, a growing number of states that is calling for a new international agreement to do just

⁷⁷ *Id.*

⁷⁸ Royte, *supra* note 75.

⁷⁹ Douglas Quenqua, *Microplastics Find Their Way into Your Gut, a Pilot Study Finds*, NY TIMES (Oct. 22, 2018), <https://www.nytimes.com/2018/10/22/health/microplastics-human-stool.html>.

⁸⁰ Royte, *supra* note 75. There is also uncertainty about the extent of human consumption of microplastics, although there are estimates. Kieran D. Cox et al., *Human Consumption of Microplastics*, 53 ENVTL. SCI. TECH. 7068 (2019).

⁸¹ In one of the most far reaching efforts, the European Parliament voted to ban single use plastics in the fall of 2018. See Ceylan Yeginsu, *European Parliament Approves Ban on Single-Use Plastics*, NY TIMES (Oct. 25, 2018), <https://www.nytimes.com/2018/10/25/world/europe/european-parliament-plastic-ban.html>. For a list of plastic waste reduction policies, see Brian Clark Howard et al., *A Running List of Action on Plastic Pollution*, NAT'L GEOGRAPHIC (Jan. 17, 2019), <https://www.nationalgeographic.com/environment/2018/07/ocean-plastic-pollution-solutions/>.

⁸² Trevor Nace, *Here's a List of Every City in the US to Ban Plastic Bags, Will Your City be Next?*, FORBES (Sept. 20, 2018), <https://www.forbes.com/sites/trevornace/2018/09/20/heres-a-list-of-every-city-in-the-us-to-ban-plastic-bags-will-your-city-be-next/>. For a review of some municipal policies banning single use plastic bags, see Sarah Fox, *Home Rule in an Era of Local Environmental Innovation*, 44 ECOL. L. Q. 575, 600–01 (2017).

Private actors involved in manufacturing plastics have begun responding to the growing concern about plastic pollution. Nathaniel Gronewold, *Oil Giants Launch \$1.5 Billion Campaign to End Plastic Crisis*, E&E NEWS (Jan. 24, 2019), <https://www.eenews.net/energywire/stories/1060118215/search?keyword=oil+giants>.

⁸³ SARA SAVARANI & BRYCE RUDYK, OCEAN PLASTIC POLLUTION 1 (NOV. 2018).

⁸⁴ *Id.*

that.⁸⁵ What such an agreement should look like, if it materializes, and who should be engaged in its drafting, remains very much an open question.

The marine plastic problem presents many of the hallmarks that we identified in Part III as militating in favor of municipal participation. To begin with, waste management has traditionally been a local government function⁸⁶ and cities control much of the infrastructure and programs involved in waste management. For instance, cities typically arrange for the collection of refuse, site and manage landfill facilities, and develop and administer recycling programs. The way in which cities perform these services can profoundly impact the release of plastics into waterways; if cities delay in collecting waste from collection points, do not enforce management procedures at landfills, or cut back recycling programs,⁸⁷ more plastic is likely to enter the waters. Yet, at least in the United States, the federal government has only limited control over the manner in which these waste management services are performed. In fact, in a case concerning a federal law that required states to dispose of low-level radioactive waste generated within their borders, the Supreme Court held that the federal government could not force states to “regulat[e] pursuant to Congress’ direction;”⁸⁸ without intruding upon the sovereignty that the Tenth Amendment reserves for the states.⁸⁹ This restriction against commandeering the states’ regulatory machinery,

⁸⁵ See, e.g., Parker, *supra* note 1 (noting that Norway, Japan and Sri Lanka support the development of a legally binding international agreement to address plastic pollution) and Catherine Benson Wahlén, *Nordic Ministers Call for Global Agreement on Marine Plastic*, IISD (Apr. 16, 2019), <https://sdg.iisd.org/news/nordic-ministers-call-for-global-agreement-on-marine-plastic/>.

(noting that ministers of the give Nordic countries issued a joint call for a global agreement on plastics).

⁸⁶ See *United Haulers Ass’n v. Oneida-Herkimer*, 550 U.S. 330, 344 (2007) (Calabresi, J., concurring) (quoting *United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 261 F.3d 245, 264 (2d Cir. 2001)). See also IAN DOUGLAS, *CITIES: AN ENVIRONMENTAL HISTORY* 179 (2013) (“[W]aste collection in most cities in developing countries consumes a considerable part of the municipal budget.”).

⁸⁷ Early in his tenure as mayor, Michael Bloomberg famously suspended plastic and glass recycling. Amy Eddings, *Bloomberg and Garbage: A Pile of Unfinished Business*, WNYC NEWS (Dec. 18, 2013), <https://www.wnyc.org/story/bloomberg-and-garbage-pile-unfinished-business/>.

⁸⁸ *New York v. U.S.*, 505 U.S. 144, 175 (1992).

⁸⁹ *Id.* at 155, 176. See also Lawrence Tribe, *Taking Text and Structure Seriously: Reflections on Free-Form Method in Constitutional Interpretation*, 108 HARV. L. REV. 1221 (1995).

which appears to apply with equal force to subdivisions of the states as it does to the states themselves,⁹⁰ likely prohibits the federal government from controlling municipal waste management programs. Thus, if the federal government were to join an international agreement to reduce plastic waste and subsequently determine that local waste management regulations were inadequate to meet the international commitments, it could develop its own regulatory framework, or incentivize local governments to regulate in a manner that accords with the federal commitments,⁹¹ but it could not compel the locality to regulate in accordance with its wishes. Given this restriction, there may be substantial efficiencies to engaging local leaders in negotiations and, hopefully, securing their commitment to advance the agreed to objectives.

A second reason that cities should be engaged in the development of an international agreement to reduce plastic waste is because they have some distinctive operational and political advantages that should be marshalled for the benefit of the cause. The problem of marine plastic pollution is unlikely to be solved, at least through the most cost effective means, by improving the disposal of plastics alone;⁹² reducing consumer demand for plastics will almost certainly have to be part of the solution. Cities, which are the jurisdictional entity closest to consumers, are particularly well positioned to educate consumers about the need to reduce plastic waste. Cities

⁹⁰ *Galarza v. Szalczyk*, 745 F.3d 634, 644 (3d Cir. 2014) (Under the Tenth Amendment’s anti-commandeering doctrine, “immigration officials may not compel state *and local* agencies to expend funds and resources to effectuate a federal regulatory scheme.”) (emphasis added).

⁹¹ Notably, the federal environmental statutes have generally side-stepped the anti-commandeering doctrine by inducing state cooperation via “promises of funding or threats of preemption” as opposed to mandates. *See* Jonathan H. Adler, *Judicial Federalism and the Future of Federal Environmental Regulation*, 90 IOWA L. REV. 377, 424 (2005).

⁹² *See e.g.*, Livia Albeck-Ripka, *Your Recycling Gets Recycled, Right? Maybe Not*, NY TIMES (May 29, 2018), <https://www.nytimes.com/2018/05/29/climate/recycling-landfills-plastic-papers.html> (noting that much of the waste that Americans designate for recycling ends up being landfilled).

also have some important regulatory and economic tools at their disposal to reduce consumer demand for plastics, including fees, taxes and bans.⁹³

American cities have begun implementing policies along these lines. For instance, in addition to all the measures targeting plastic bags mentioned above, a number of cities (and the state of California) have banned plastic straws or discourage their distribution.⁹⁴ This past January, Berkeley adopted a particularly innovative policy aimed at reducing plastic ware which combines a \$0.25 fee on disposal cups with a mandate that establishments that offer customers the possibility of eating on the premises utilize reusable cutlery and dishes.⁹⁵ American cities are not alone in taking such actions; Glasgow, New Delhi, Vancouver and others have passed laws limiting plastic consumption that go beyond what the national governments' require. And while national or federal governments may have the legal authority to implement similar such policies, as a political matter, the fact that cities are typically more progressive than the nation as a whole may facilitate the adoption of more robust policies at the local level. Cities may also have stronger incentives than higher levels of government to pursue waste reduction programs because they pay for sanitation programs.

A third reason that cities should be engaged in developing an inter-state agreement to reduce plastic waste harkens back to the constructivist arguments for international law. As noted above, solving the problem of marine plastic pollution will require mobilizing the public at large; it is not a problem that can be solved by centrally regulating a small class of industrial polluters. Given

⁹³ On the scope of municipal fiscal authority to address environmental problems in the United States, see Wyman & Spiegel-Feld, *supra* note 52.

⁹⁴ Hilary Brueck, *The Real Reason Why So Many Cities and Businesses are Banning Plastic Straws Has Nothing to Do with Straws at All*, BUS. INSIDER (Oct. 22, 2018), <https://www.businessinsider.com/plastic-straw-ban-why-are-there-so-many-2018-7>.

⁹⁵ PLASTIC POLLUTION COALITION, *Berkeley, CA Passes Groundbreaking Policy to Reduce Single-Use Foodware* (Jan. 24, 2019), <https://www.plasticpollutioncoalition.org/pft/2019/1/24/berkeley-ca-passes-groundbreaking-policy-to-reduce-single-use-foodware>.

this, the constructivist view of international law – that it serves to create and socialize new norms⁹⁶ – seems particularly germane. And the more opportunities that cities are granted to engage in the development of anti-plastic norms, the more we can expect cities to believe in the importance of such norms and invest in their diffusion. Thus, engaging cities directly in inter-state negotiations regarding the reduction of marine plastics may strengthen their resolve to assist in the global fight.

V. Conclusion

Environmental treaties are effectively contracts between nation states to address cross-boundary problems. While nation states have a monopoly on creating international law through treaties, functional analysis suggests that non-state actors, including cities, should sometimes be included in negotiating agreements to address cross-boundary environmental problems if these agreements are to be maximally effective. Marine plastics pollution is a problem in which local engagement at the international level would be helpful because of the historical responsibility of cities in managing waste, the difficulties that nation states may have corraling cities to change their waste management practices, and the potential for cities to help change societal norms to reduce the use of plastics. More generally, functional considerations should be considered in designing international processes to address cross-boundary environmental problems. Improvements in the institutional design of treaties could lead to better environmental outcomes.⁹⁷

⁹⁶ See *supra* note 50 with accompanying text.

⁹⁷ See generally TAVARES, *supra* note 26, at 28 (calling for improvements in paradiplomacy, not more paradiplomacy).