

ARTICLE

Subnational Climate Clubs: An Interactional Approach to Transnational Lawmaking

Ling Chen 

Faculty of Law, McGill University, Montreal (Canada); East Asian Legal Studies, Harvard Law School, Cambridge, MA (United States)
Email: ling.chen4@mail.mcgill.ca

(First published online 10 March 2025)

Abstract

Predominant climate club research emphasizes state-centric clubs that alter the incentive structure and bargaining context for climate cooperation. This focus on national governments, however, leaves climate clubs vulnerable to political turbulence afflicting individual club members. Subnational governments are an important yet often overlooked type of actor in the club literature. This article contributes to understanding the role and nature of subnational government-led clubs in transnational climate governance and lawmaking through qualitative case studies of the Western Climate Initiative and the C40 Cities Climate Leadership Group. I identify the distinguishing characteristics that these clubs manifest in their membership and functions, as formalized through legal arrangements. I demonstrate that these clubs have the potential to increase structural stability, withstand political changes, and enhance the legitimacy and efficacy of climate action. They do so by functioning not only as organizations that create incentives for committing to legal norms and mechanisms for deterring free riding but also as communities of practice that generate shared understandings, resources, and norms to sustain club cooperation in pursuing a shared commitment to climate action. As such, each club applies a mix of rationalist approaches to benefit generation and constructivist approaches to community building.

Keywords: Climate clubs; Subnational governments; Transnational climate governance; Rationalism; Constructivism; Communities of practice

1. Introduction

Climate governance initiatives have proliferated within and beyond the United Nations Framework Convention on Climate Change (UNFCCC)¹ – the primary multilateral regime with near-universal membership. Initiatives outside the UNFCCC exhibit a polycentric pattern, spanning a spectrum from national policies and regulations to regional agreements and more flexible approaches like climate action plans, strategies, and programmes.² Various actors are experimenting with

¹ New York, NY (United States (US)), 9 May 1992, in force 21 Mar. 1994, available at: <https://unfccc.int>.

² E. Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change' (2010) 20(4) *Global Environmental Change*, pp. 550–7; C. Unger, K.A. Mar & K. Gürtler, 'A Club's

collaborative action to adjust behaviour, reduce energy consumption and carbon footprint, and contribute to large-scale shifts in economic and energy systems, without waiting for multilateral agreements to do the work.³ So-called ‘climate clubs’ are among the emerging forces delivering collaborative climate action. The surging academic and policy interest in these clubs has fuelled research on their potential, progress, effectiveness, and interplay with broader climate governance and trade regimes.⁴

The prevalent literature particularly emphasizes state-centric clubs that alter the incentive structure and bargaining context for climate cooperation. Economic club theory posits that clubs generate ‘club goods’ to offer incentives to members for participation and compliance.⁵ Most notably, Nordhaus proposes a club where countries harmonize emissions reductions with coordinated carbon pricing and penalty tariffs,⁶ as practised in Europe to expand carbon border adjustment mechanisms for industry decarbonization.⁷ Political scientists suggest that climate clubs can bypass or transform gridlocked multilateral negotiations by improving bargaining efficiency with a smaller group of like-minded or powerful countries playing a pivotal role in decision making.⁸ Forums embodying club characteristics, such as the Asia-Pacific Partnership on Clean Development and Climate and the Major Economies Forum on Energy and Climate,⁹ illustrate great power collaboration via ‘minilateralism’, convening ‘the smallest possible number of countries needed to have

Contribution to Global Climate Governance: The Case of the Climate and Clean Air Coalition’ (2020) 6 *Palgrave Communications*, article 99, pp. 1–2.

³ Ostrom, n. 2 above, p. 551; S. Bernstein & M. Hoffmann, ‘The Politics of Decarbonization and the Catalytic Impact of Subnational Climate Experiments’ (2018) 51 *Policy Sciences*, pp. 189–211; L. Chen, ‘Market Mechanisms, Corporations and Article 6 of the Paris Agreement’, in S. Maljean-Dubois & J. Peel (eds), *Climate Change and the Testing of International Law* (Brill, 2023), pp. 421–42, at 429.

⁴ See, e.g., L. Weischer, J. Morgan & M. Patel, ‘Climate Clubs: Can Small Groups of Countries Make a Big Difference in Addressing Climate Change?’ (2012) 21(3) *Review of European Community & International Environmental Law*, pp. 177–92; J. Hovi et al., ‘Climate Change Mitigation: A Role for Climate Clubs?’ (2016) 2 *Palgrave Communications*, article 16020; R. Falkner, ‘A Minilateral Solution for Global Climate Change? On Bargaining Efficiency, Club Benefits, and International Legitimacy’ (2016) 14(1) *Perspectives on Politics*, pp. 87–101; R.O. Keohane & D.G. Victor, ‘The Regime Complex for Climate Change’ (2011) 9(1) *Perspectives on Politics*, pp. 7–23.

⁵ J.M. Buchanan, ‘An Economic Theory of Clubs’ (1965) 32(125) *Economica*, pp. 1–14; T. Sandler & J. Tschirhart, ‘Club Theory: Thirty Years Later’ (1997) 93(3/4) *Public Choice*, pp. 335–55.

⁶ W. Nordhaus, ‘Climate Clubs: Overcoming Free-Riding in International Climate Policy’ (2015) 105(4) *American Economic Review*, pp. 1339–70, at 1352.

⁷ For one such mechanism see Regulation (EU) 2023/956 Establishing a Carbon Border Adjustment Mechanism [2023] OJ L 130/52. See further I.A. Bashmakov et al., ‘Industry’, in Intergovernmental Panel on Climate Change (IPCC) (P.R. Shukla et al. (eds)), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2022), pp. 1161–243, at 1214.

⁸ Falkner, n. 4 above, pp. 89–90, 94; D.G. Victor, ‘Toward Effective International Cooperation on Climate Change: Numbers, Interests and Institutions’ (2006) 6(3) *Global Environmental Politics*, pp. 90–103, at 96, 101.

⁹ Keohane & Victor, n. 4 above, pp. 10–1; H. van Asselt, ‘From UN-ity to Diversity? The UNFCCC, the Asia-Pacific Partnership, and the Future of International Law on Climate Change’ (2007) 1(1) *Carbon & Climate Law Review*, pp. 17–28, at 20.

the largest possible impact'.¹⁰ However, the state-centric focus leaves climate clubs vulnerable to political turbulence within influential members. The UNFCCC itself has experienced periodic setbacks, especially when major emitting countries disengaged from the Kyoto Protocol¹¹ and the Paris Agreement¹² following domestic political changes.¹³ The structural challenges plaguing the UNFCCC could also impede progress in state-centric clubs, as merely transitioning from a larger group to a smaller one with identical interests may not guarantee advancement.¹⁴

Subnational governments are another important type of actor, yet they are often overlooked in the club literature. Climate issues often intersect with land-use planning, waste management, transportation, and electricity – areas predominantly under regional and local jurisdiction. Cooperation agreements may be more feasible and consistent locally, where interests and values align more closely than at national or international levels.¹⁵ These 'contextually situated actors' bring invaluable local knowledge and are ideally positioned to execute targeted climate actions.¹⁶ Moreover, local climate policies are interconnected, involving information exchange, shared values, and the widespread adoption of proven strategies across jurisdictions and governance levels.¹⁷ Although some scholars have explored the formation and management of climate clubs by these actors,¹⁸ most proposals and practices consider

¹⁰ M. Naím, 'Minilateralism: The Magic Number to Get Real International Action', *Foreign Policy*, 21 June 2009, available at: <https://foreignpolicy.com/2009/06/21/minilateralism>; M. Kahler, 'Multilateralism with Small and Large Numbers' (1992) 46(3) *International Organization*, pp. 681–708, at 690.

¹¹ Kyoto (Japan), 11 Dec. 1997, in force 16 Feb. 2005, available at: <https://unfccc.int/resource/docs/convkp/kpeng.pdf>.

¹² Paris (France), 12 Dec. 2015, in force 4 Nov. 2016, available at: https://unfccc.int/sites/default/files/english_paris_agreement.pdf.

¹³ J. Brunnée & S. Toope, *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge University Press, 2010), pp. 175, 188; D. Bodansky, J. Brunnée & L. Rajamani, *International Climate Change Law* (Oxford University Press, 2017), pp. 258–9.

¹⁴ Falkner, n. 4 above, pp. 88, 91.

¹⁵ Different levels of subnational governments possess varying authority over specific issues. Municipal governments often hold legal jurisdiction over waste management and energy efficiency in buildings. Provincial governments may have greater authority in areas like electricity, land use, and transportation. See further Bodansky, Brunnée & Rajamani, n. 13 above, p. 281; N.K. Dubash et al., 'National and Sub-national Policies and Institutions', in IPCC (Shukla et al.), n. 7 above, pp. 1355–450, at 1378; J. Lin, *Governing Climate Change: Global Cities and Transnational Lawmaking* (Cambridge University Press, 2018), p. 118; Chen, n. 3 above, p. 429.

¹⁶ G. De Búrca, R.O. Keohane & C. Sabel, 'Global Experimentalist Governance' (2014) 44(3) *British Journal of Political Science*, pp. 477–86, at 478.

¹⁷ C. Streck, 'Strengthening the Paris Agreement by Holding Non-State Actors Accountable: Establishing Normative Links between Transnational Partnerships and Treaty Implementation' (2021) 10(3) *Transnational Environmental Law*, pp. 493–515, at 496; R.B. Stewart, M. Oppenheimer & B. Rudyk, 'Building Blocks: A Strategy for Near-Term Action within the New Global Climate Framework' (2017) 144 *Climatic Change*, pp. 1–13, at 4; Bodansky, Brunnée & Rajamani, n. 13 above, pp. 282–3.

¹⁸ See, e.g., R.B. Stewart, M. Oppenheimer & B. Rudyk, 'A New Strategy for Global Climate Protection' (2013) 120 *Climatic Change*, pp. 1–12; Stewart, Oppenheimer & Rudyk, 'Building Blocks', n. 17 above; T.L. Brewer, H. Derwent & A. Blachowicz, *Carbon Market Clubs and the New Paris Regime* (World Bank, 2016).

national governments to be dominant in funding and governing climate clubs.¹⁹ There is a notable lack of attention to the interactions between subnational governments and climate clubs, with limited empirical examination of their potential advantages and drawbacks.²⁰

This article makes an original contribution to understanding the role and nature of climate clubs led by subnational governments (termed ‘subnational climate clubs’) in transnational climate governance and lawmaking. Through qualitative case studies of two exemplary models – the Western Climate Initiative (WCI) and the C40 Cities Climate Leadership Group (C40) – I demonstrate that these clubs have the potential to increase structural stability, withstand political changes, and enhance the legitimacy and efficacy of climate action. They do so by functioning not only as organizations that create incentives for committing to legal norms and mechanisms for deterring free riding but also as communities of practice that generate shared understandings, resources, and norms to sustain club cooperation towards a shared commitment to climate action. These in-depth case studies illustrate each club’s practices in bridging rationalist and constructivist approaches, though to varying extents, to create benefits, norms, and communities that advance climate governance and lawmaking.²¹

The rest of the article is structured as follows. Section 2 explains the distinguishing characteristics that climate clubs manifest in their membership and functions, which provide the initial conceptual elements for analyzing subnational climate clubs. I then discuss the case selection of the WCI and C40 and the data collection methods. These conceptual elements guide the case studies in Section 3 on how these clubs select and manage members and, in Section 4, on the functions through which they produce public and club benefits. Section 5 examines the underexplored legal foundations of climate clubs, which form a key pillar of their structure. I analyze how the WCI and C40 use club norms – including the development, diffusion, and implementation of legal norms – to sustain member engagement, benefit generation, and community building for improved climate action. The final section (6) discusses the key findings of the case studies and concludes.

¹⁹ See, e.g., Weischer, Morgan & Patel, n. 4 above, pp. 180–3 (identifying 17 state-centric clubs emerging between 1974 and 2012, with membership ranging from 7 to 73); Hovi et al., n. 4 above, p. 7.

²⁰ Unger, Mar & Gürtler, n. 2 above, p. 2 (noting the lack of thorough analysis and case studies of transnational climate clubs). For some examples see R. Falkner, N. Nasiritousi & G. Reischl, ‘Climate Clubs: Politically Feasible and Desirable?’ (2022) 22(4) *Climate Policy*, pp. 480–7, at 481 (studying climate club legitimacy through exploratory interviews); A. Patt et al., ‘International Cooperation’, in IPCC (Shukla et al.), n. 7 above, pp. 1451–545, at 1458–9 (summarizing key climate club modelling results); C. Unger & S. Thielges, ‘Preparing the Playing Field: Climate Club Governance of the G20, Climate and Clean Air Coalition, and Under2 Coalition’ (2021) 167 *Climatic Change*, article 41.

²¹ For the two approaches see especially A. Prakash & M. Potoski, *The Voluntary Environmentalists: Green Clubs, ISO 14001, and Voluntary Environmental Regulations* (Cambridge University Press, 2006), p. 41; Falkner, n. 4 above, pp. 88, 91–2; J. Ellis, ‘Fisheries Conservation in an Anarchical System: A Comparison of Rational Choice and Constructivist Perspectives’ (2007) 3(2) *Journal of International Law and International Relations*, pp. 1–40, at 2–3, 16, 20, 36; Brunnée & Toope, n. 13 above, pp. 14–5, 27.

2. A Framework for Analyzing Subnational Climate Clubs

2.1. Characteristics of Climate Clubs

As climate clubs evolve from an idea to a more substantive state of formation and implementation, their establishment, design, and activities increasingly interact with transnational climate governance and lawmaking.²² Climate clubs derive from economic club theory, which prioritizes the creation of excludable, non-rivalrous ‘club goods’,²³ and need to be delimited against related governance initiatives like networks and coalitions. They exhibit two central characteristics highlighted by the existing literature: membership and functions.

Firstly, climate clubs differentiate between members and non-members, with specific barriers to entry. By formulating a common purpose and membership rules, clubs provide a more permanent structure than ad hoc or one-off gatherings.²⁴ In contrast, networks and coalitions are much more fluid and open to participants.²⁵ For example, a defining characteristic of transnational municipal networks is that members are ‘autonomous and free to join or leave’.²⁶ Unlike clubs, coalitions do not require significant commitments, set participation standards, or monitor compliance.²⁷ The minimal political and financial costs and lack of monitoring make it easy for weakly committed participants to join networks and coalitions.²⁸ As a result, many participants remain relatively passive, with membership being symbolic and not necessarily leading to direct action on the ground.²⁹

Secondly, climate clubs incentivize participation and compliance by deriving exclusive benefits from member cooperation. These benefits do not have to be economic; they can come in the form of access to resources or expertise, enhanced coordination, or an identity built around shared norms. The designation of ‘clubs’ inherently signals that these organizations provide exclusive benefits for their members, in contrast to ‘networks’ and ‘coalitions’, which do not necessarily indicate

²² For some of the discussions on the role and nature of clubs in climate governance see Weischer, Morgan & Patel, n. 4 above, p. 178; Falkner, Nasiritousi & Reischl, n. 20 above. For the few, but growing, studies focused on the international economic law aspect of climate clubs see T. Meyer, ‘Taxing, Regulating, and Trading Carbon: An Introduction to the Symposium’ (2022) 116 *American Journal of International Law Unbound*, pp. 191–5; G.C. Leonelli, ‘The Long and Winding Road Towards the Creation of Climate Clubs: Transatlantic Negotiations, Potential Regulatory Models and Challenges Ahead’ (2023) 32(3) *Review of European, Comparative & International Environmental Law*, pp. 453–64.

²³ Club goods are generally non-rivalrous but ‘subject to some rivalry in the form of congestion’; see Sandler & Tschirhart, n. 5 above, p. 336; Buchanan, n. 5 above.

²⁴ Falkner, Nasiritousi & Reischl, n. 20 above, p. 482; Buchanan, n. 5 above, p. 2.

²⁵ J. Fox, ‘Coalitions and Networks’, in H.K. Anheier & S. Toepler (eds), *International Encyclopedia of Civil Society* (Springer, 2010), pp. 486–92, at 487.

²⁶ K. Kern & H. Bulkeley, ‘Cities, Europeanization and Multi-Level Governance: Governing Climate Change through Transnational Municipal Networks’ (2009) 47(2) *Journal of Common Market Studies*, pp. 309–32, at 309.

²⁷ Stewart, Oppenheimer & Rudyk, ‘Building Blocks’, n. 17 above, pp. 5, 7.

²⁸ R.M. Krause, ‘An Assessment of the Impact that Participation in Local Climate Networks Has on Cities’ Implementation of Climate, Energy, and Transportation Policies’ (2012) 29(5) *Review of Policy Research*, pp. 585–604, at 601.

²⁹ Kern & Bulkeley, n. 26 above, pp. 316, 326; Lin, n. 15 above, p. 108.

such benefits.³⁰ Much of the resource exchange and assistance provided by networks and coalitions is not exclusive to their participants.³¹ While networks and coalitions may sometimes lead to shared norms and identities, this outcome is not guaranteed.³² Networks typically involve loose coordination in campaigns and joint actions, whereas coalitions engage in joint actions based on mutually agreed but usually short-term tactical goals.³³

These two characteristics of *membership* and *functions* form the initial conceptual elements for my in-depth analysis of subnational climate clubs. Recent literature continues to address interstate or state-centric partnerships,³⁴ with suggested memberships comparable to the scale of cooperation between the United States (US) and China or among G7 or G20 members.³⁵ However, relying solely on powerful countries to lead climate clubs can be counter-productive. If these countries are unwilling to engage, it limits clubs' potential by neglecting the diverse strengths and resources that a broader range of stakeholders can bring to climate governance.³⁶ As I will show in Section 3, the *member selection and management* of subnational clubs offer insights into their ability to increase structural stability. They design selective membership not only through an interest-driven, rationalist approach aimed at deterring free riding and enhancing efficiency but also through a constructivist approach that ties membership to shared understandings, norms, and identities to reinforce commitment and action.³⁷

My study of the functions of subnational clubs (Section 4) distinguishes and connects *public benefits* (benefits accruing to the public) and *club benefits* (benefits for members only), alongside their associated activities.³⁸ On the one hand, these clubs can generate public benefits by driving activities for emissions reductions while making institutional and normative contributions to transnational climate governance – that is, *enhancing political dialogue and support, sharing information, building policy and programme implementation capacities, and developing club norms*. On the other

³⁰ Stewart, Oppenheimer & Rudyk, 'Building Blocks', n. 17 above, pp. 5, 7.

³¹ Krause, n. 28 above, p. 602.

³² Fox, n. 25 above, p. 487.

³³ *Ibid.*, pp. 488–9.

³⁴ See, e.g., L. Paroussos et al., 'Climate Clubs and the Macro-Economic Benefits of International Cooperation on Climate Policy' (2019) 9 *Nature Climate Change*, pp. 542–6 (selecting a set of core countries representing 51% of global greenhouse gas emissions); Hovi et al., n. 4 above, p. 7 (indicating that extant models have focused exclusively on states).

³⁵ Falkner, n. 4 above, p. 89.

³⁶ See, e.g., T. Kuramochi et al., 'Beyond National Climate Action: The Impact of Region, City, and Business Commitments on Global Greenhouse Gas Emissions' (2020) 20(3) *Climate Policy*, pp. 275–91 (showing the substantial emissions reduction contributions of subnational governments and corporations beyond that which countries alone can achieve).

³⁷ See, e.g., Falkner, n. 4 above, pp. 88, 91–2; Ellis, n. 21 above, pp. 2–3, 16–7, 20–1; Brunnée & Toope, n. 13 above, pp. 14–5.

³⁸ I drew insights from the multidisciplinary scholarship on the functional categories of clubs and climate governance; see, e.g., Unger, Mar & Gürtler, n. 2 above, pp. 4–5; T. Tenbensel, 'Multiple Modes of Governance: Disentangling the Alternatives to Hierarchies and Markets' (2005) 7(2) *Public Management Review*, pp. 267–88, at 281, 284; L.B. Andonova, M.M. Betsill & H. Bulkeley, 'Transnational Climate Governance' (2009) 9(2) *Global Environmental Politics*, pp. 52–73, at 63.

hand, clubs can reframe the public-good nature of climate action by sharing its costs among members and deriving club benefits, such as *economic* and *reputational gains*, from their cooperation.³⁹ Categorizing public and club benefits is by no means to negate their connection. Rather, the great utility of club benefits lies in their ability to improve the provision of public benefits, and pursuing public benefits in a club setting can give members advantages over non-members.

The categorization suggested here provides three analytical advantages over existing frameworks. Firstly, it enhances analytical clarity by unpacking how subnational clubs contribute to climate governance and what motivates their membership.⁴⁰ Even though these clubs might share certain functions with networks and coalitions – such as supporting dialogue, information sharing, and publicity – networks and coalitions do not necessarily create or facilitate access to resources that incentivize participation.⁴¹ Secondly, it differentiates clubs that prioritize climate-oriented public benefits from those with other priorities, which is crucial for evaluating whether they are serious about climate action, and affects their legitimacy and efficacy. Proposals that strictly adhere to economic club theory, where non-climate benefits are seen as primary or sole incentives for participation, overlook the functions of climate clubs that prioritize climate altruism.⁴² Understanding how these clubs pursue non-excludable climate benefits beyond club benefits requires more than rationalist explanations. While offering club benefits can initially attract members, sustaining stable cooperation can be better achieved by bridging the rationalist approach with constructivism, which illuminates how a club's incentive-shifting measures evolve, gain acceptance, and how club norms support their development.⁴³ Valuing both the production of public and club benefits and the cultivation of communities that practise club norms to ensure the continued generation of these benefits is what distinguishes climate clubs from *economic* clubs and other climate governance initiatives. Thirdly, by categorizing functions rather than clubs,⁴⁴ this typology avoids oversimplification. Acknowledging that a club can perform multiple functions simultaneously provides a more comprehensive view, moving beyond pigeonholing it into categories like a 'bargaining' or 'normative' club.

The voluntary nature of climate clubs and their inclusion of subnational governments invite legal questions about how these clubs use legal norms to strengthen member selection, management, and influence on climate action. A careful

³⁹ Falkner, n. 4 above, p. 92.

⁴⁰ Unger, Mar & Gürtler, n. 2 above, p. 3. For analytical frameworks on transnational climate governance see, e.g., Andonova, Betsill & Bulkeley, n. 38 above; H. Bulkeley et al., *Transnational Climate Change Governance* (Cambridge University Press, 2014).

⁴¹ Fox, n. 25 above, p. 490; Krause, n. 28 above, pp. 587, 602.

⁴² For clubs treating climate benefits as a secondary or supplemental benefit see Stewart, Oppenheimer & Rudyk, 'Building Blocks', n. 17 above, p. 4; P.M. Hannam et al., 'Incomplete Cooperation and Co-Benefits: Deepening Climate Cooperation with a Proliferation of Small Agreements' (2017) 144 *Climatic Change*, pp. 65–79, at 68.

⁴³ See, e.g., Ellis, n. 21 above, pp. 2–3, 20.

⁴⁴ Falkner, Nasiritousi & Reischl, n. 20 above (establishing a typology of normative, bargaining, and transformational clubs).

treatment of the contributions of subnational climate clubs to the law can identify norms and practices that increase structural stability, withstand political changes, and drive legitimacy and efficacy. As will be analyzed in Section 5, these clubs facilitate the creation and practice of influential legal norms through the incentives they provide for members and the communities of practice they establish to pursue specific climate policies. The norms created by these clubs can be as straightforward as contractual agreements to solidify and further member interests.⁴⁵ They can also involve standards of behaviour rooted in shared understandings and practices that advance climate action,⁴⁶ which may eventually crystallize into interactional law, fostering a sense of commitment among members on how to address problems and identify solutions.⁴⁷

Climate clubs, especially those led by subnational governments, diverge from traditional domestic or international governance systems that enforce compliance primarily through sovereign power and hierarchical authority.⁴⁸ Instead of exerting direct control, these clubs leverage their members' authority and collective strength to drive climate action. They strategically shift the climate discourse away from disputes common in national and international processes, such as high emissions-reduction costs and legally binding climate targets.⁴⁹ Their less adversarial approach promotes emissions reduction through mutual benefits and community building. Although clubs, networks, and coalitions all involve certain degrees of self-governance, clubs establish more selective and legally stringent structures for transnational cooperation. Nonetheless, the closed-door, member-only character of these clubs may raise concerns about their transparency in climate governance and lawmaking, as well as their direct contribution to reducing emissions.⁵⁰

2.2. Case Study Design

The conceptual elements outlined in the preceding subsection guide my case studies of the WCI and C40. After reviewing subnational government-led climate initiatives that exhibit club characteristics in the existing literature,⁵¹ I selected the WCI and C40

⁴⁵ See, e.g., Nordhaus, n. 6 above, p. 1341; K.W. Abbott & D. Snidal, 'Hard and Soft Law in International Governance' (2000) 54(3) *International Organization*, pp. 421–56, at 424–6.

⁴⁶ I was inspired by J. Brunnée & S.J. Toope, 'Constructivism and International Law', in J.L. Dunoff & M.A. Pollack (eds), *Interdisciplinary Perspectives on International Law and International Relations: The State of the Art* (Cambridge University Press, 2013), pp. 119–45, at 119 (defining norms as 'standards of behavior created through mutual expectation in a social setting').

⁴⁷ Brunnée & Toope, n. 13 above, pp. 14–5, 27, 45; Ellis, n. 21 above, pp. 2–3, 20.

⁴⁸ See, e.g., Andonova, Betsill & Bulkeley, n. 38 above, p. 65.

⁴⁹ See, e.g., Lin, n. 15 above, pp. 129, 153.

⁵⁰ See, e.g., S.I. Karlsson-Vinkhuyzen & J. McGee, 'Legitimacy in an Era of Fragmentation: The Case of Global Climate Governance' (2013) 13(3) *Global Environmental Politics*, pp. 56–78.

⁵¹ For these initiatives see especially I. Ko & A. Prakash, 'Signaling Climate Resilience to Municipal Bond Markets: Does Membership in Adaptation-Focused Voluntary Clubs Affect Bond Rating?' (2022) 171 *Climatic Change*, article 9; Bulkeley et al., n. 40 above, pp. 20–1.

because they unite subnational governments with significant greenhouse gas (GHG) emissions and the political and economic strengths to sustain partnerships.⁵² Both clubs have demonstrated durability over the past 15 years, despite challenges such as membership fluctuations. The WCI supports North America's largest carbon markets, covering the most comprehensive sectoral emissions globally.⁵³ C40 connects nearly 100 cities to lead tangible climate action, representing over 582 million people and roughly 20% of the global gross domestic product (GDP).⁵⁴ While both clubs offer a range of benefits to motivate climate action, they differ in membership size, composition, and functions, each reflecting varying shades of rationalist and constructivist approaches to climate governance and lawmaking. The WCI exemplifies a carbon market club,⁵⁵ where members develop cap-and-trade norms and share cost-effective programme management. This smaller, regionally focused composition contrasts with the global reach of C40, which generates meaningful benefits that enhance its appeal to members while building a community of practice for shared knowledge, resources, and norms that drive members towards halving their collective emissions by 2030 and reaching net zero by 2050.⁵⁶

My case studies began with a qualitative content analysis of primary and secondary literature on the WCI and C40. To grasp member engagement, I compared the commitments outlined in these clubs' documents with the actual actions taken domestically, as reflected in policies, regulations, and other official documents. Examining how the WCI and C40 resemble or differ in setting membership requirements, performing functions, and interacting with the law enhances my evaluation of their objectives, performance, and impact as benefit-generating organizations and communities of practice. A critical analysis of secondary literature produced further insights into the history and context of their development, corroborated my evaluation, and provided theoretical underpinnings – rationalist and constructivist approaches – to the nature of the two clubs in benefit generation and community building.

⁵² Some literature mentions the WCI and C40 as examples of climate clubs but lacks a nuanced analysis of how they operate as clubs to contribute to climate governance and lawmaking; see, e.g., Brewer, Derwent & Blachowicz, n. 18 above, pp. 5–6 (listing the WCI as an example of carbon market clubs); H.P. Aust, 'Shining Cities on the Hill? The Global City, Climate Change, and International Law' (2015) 26(1) *European Journal of International Law*, pp. 255–78, at 261 (considering C40 as 'a club of particularly virtuous cities'); Lin, n. 15 above, p. 116 (noting that C40 aims for selectivity and some degree of exclusivity as a club).

⁵³ WCI, Inc., '2022 Annual Report: Activities and Accomplishments', 12 May 2023 (WCI Inc. 2022 Annual Report), p. 3, available at: <https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/documents/annualreport2022-20230512-en.pdf>.

⁵⁴ C40, 'C40 Cities Membership', updated 10 Jan. 2025, available at: https://www.c40.org/wp-content/uploads/2023/04/C40-Cities-Membership-01_11_23.pdf.

⁵⁵ For this type of club see, e.g., N. Keohane, A. Petsonk & A. Hanafi, 'Toward a Club of Carbon Markets' (2017) 144 *Climatic Change*, pp. 81–95, at 87.

⁵⁶ C40 & Arup, 'Deadline 2020: How Cities Will Get the Job Done', Nov. 2016, available at: https://www.c40knowledgehub.org/s/article/Deadline-2020-How-cities-will-get-the-job-done?language=en_US; C40, 'Statement by the C40 Cities Steering Committee on the Organisation's New Leadership Standards' (C40 Leadership Standards), 6 Jan. 2021, available at: <https://www.c40.org/news/statement-by-the-c40-cities-steering-committee>.

Complementing this analysis, I conducted 14 semi-structured interviews: three related to the WCI and 11 for C40.⁵⁷ The interviewees – who included politicians, policy advisers, economists, legal professionals, and urban planners – were selected for their expertise and involvement in the relevant club.⁵⁸ For the WCI study, interviewees were from member jurisdictions, with two also involved in developing or managing the WCI. Among the 11 interviewees for the C40 study, four were directly affiliated with C40, and seven were from member cities, including one with professional experience in both settings. I created interview questions in line with my conceptual elements, tailored to each interviewee's unique experiences and knowledge.⁵⁹ It should be noted that the seven interviewees from the C40 member cities were based in North America and China. This selection is significant because both the US and Canada have seen subnational governments fill policy leadership voids when federal governments fall short on climate action. In contrast, subnational governments in China are perceived as less engaged in transnational climate governance,⁶⁰ highlighting the importance of understanding how C40 connects Chinese cities to global partners. That said, this geographical focus may limit the study's empirical implications and generalizability. Indeed, the diversity of C40 cities may bring challenges for understanding and addressing the different political and legal constraints faced by these cities more generally.⁶¹ Overall, my interviews with the two clubs yielded valuable insights in terms of the motivations, benefits, and impacts of joining the club, uncovering details not readily found in the existing literature. To reduce biases that might arise because the interviewees were affiliated or interacting with the WCI or C40 (such as portraying these organizations in a positive way), I used primary and secondary literature to triangulate the claims made by interviewees and drew interpretations from different sources of evidence. I also corroborated the collected information by cross-checking claims made by different interviewees while maintaining their confidentiality.

3. Membership

The WCI and C40 both apply demanding approaches to member selection and provide varying degrees of autonomy in member management. The WCI reflects a rationalist approach in its membership design to enhance bargaining and deter free

⁵⁷ The interviews were conducted between Nov. 2021 and Aug. 2022, following receipt of the Certificate of Ethical Acceptability of Research Involving Humans from the Research Ethics Board Office of McGill University.

⁵⁸ Starting with a list compiled from existing literature and public biographies, I contacted the most relevant individuals for interviews. Since the WCI and C40 provide general rather than individual contacts, I also incorporated recommendations from participants. Over 40 requests were sent, and 14 were accepted, including 2 written answers.

⁵⁹ More information is on file with the author.

⁶⁰ See, e.g., L.K. Westman, V.C. Broto & P. Huang, 'Revisiting Multi-Level Governance Theory: Politics and Innovation in the Urban Climate Transition in Rizhao, China' (2019) 70 *Political Geography*, pp. 14–23, at 15.

⁶¹ C40 categorizes its member cities into seven regions: Africa; Central East Asia; East, Southeast Asia, and Oceania; Europe; Latin America; North America; and South and West Asia: C40, 'Our Cities', available at: <https://www.c40.org/cities>.

riding. Its funding model is based on member contributions, which amounted to an overall budget of US\$10.8 million in 2022.⁶² Contributions vary among members in proportion to their emissions levels and can influence decisions to join, contingent upon each jurisdiction's financial situation and policy priorities.⁶³ While this financial commitment poses an entry barrier, it ensures that only jurisdictions that are committed to implementing cap-and-trade programmes become members. Each member can negotiate and access the exclusive services of WCI Inc., a non-profit corporation providing technical, scientific, and administrative support.⁶⁴ This rationalist approach uses membership fees as a key criterion to select members strategically to deter free riding and shirking, thereby upholding the club's focus and quality. The geographical reach of the WCI across the US and Canada displays the regional focus of its membership. It maintains an open-door policy for observers in the region and engages with interested jurisdictions to promote solutions that align with its members' interests and disseminate their climate policies as broadly as possible.⁶⁵

The WCI highlights the efficiency of a club that gives each member considerable autonomy in managing individual programmes and promotes shared responsibility and governance within the group.⁶⁶ The WCI does not implement standardized performance reviews; instead, members are responsible for evaluating their own programmes and making adjustments as needed.⁶⁷ While members can exchange programme insights, no supranational authority oversees them. Each member decides its engagement level, including sharing the cost of the cap-and-trade management system⁶⁸ and a more sophisticated form of cooperation – linking individual programmes. For instance, Ontario opted to join the California–Quebec carbon market, which required thorough peer reviews of compatibility, enforceability, and liability, along with high-level approvals.⁶⁹

⁶² WCI Inc. 2022 Annual Report, n. 53 above, p. 14.

⁶³ For 2022, California, Quebec, Nova Scotia, and Washington contributed US\$7,021,579, US\$1,128,424, US\$251,364, and US\$1,475,077, respectively: WCI Inc. 2022 Annual Report, *ibid.*, p. 15. See also State of California & Western Climate Initiative, Inc., Standard Agreement (California Funding Agreement), 1 Jan. 2022, Exhibit A, para. 1, available at: <https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/fundingagreementcalifornia-20211217-en-signatureonfile.pdf>.

⁶⁴ By-Laws of Western Climate Initiative, Inc. (WCI Inc. By-Laws), 3 Nov. 2011, revised 17 Dec. 2021, Art. I, available at: <https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/documents/bylaws-20211217-en.pdf>.

⁶⁵ Western Regional Climate Action Initiative Agreement (WCI Agreement), Washington, DC (US), 26 Feb. 2007, available at: https://www.gov.mb.ca/asset_library/en/documents/fedprovrelations/northamerica/western_regional_climate_action_initiative_agreement.pdf; WCI, 'Design for the WCI Regional Program' (WCI Program Design), 27 July 2010, p. 6, available at: <https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/documents/en/wci-program-design-archive/WCI-ProgramDesign-20100727-EN.pdf>. See also WCI Interviewee 3, 'WCI Interview', 28 Jan. 2022 (noting the instrumental roles of WCI Inc. and current members in swaying and supporting new members).

⁶⁶ WCI Inc. By-Laws, n. 64 above, Art. I.

⁶⁷ WCI Interviewee 3, n. 65 above.

⁶⁸ WCI Interviewee 2, 'WCI Interview', 20 Jan. 2022; Patt et al., n. 20 above, p. 1458.

⁶⁹ L. Chen, 'Are Emissions Trading Schemes a Pathway to Enhancing Transparency under the Paris Agreement?' (2018) 19(3) *Vermont Journal of Environmental Law*, pp. 306–37, at 331–2; WCI Interviewee 1, 'WCI Interview', 14 Dec. 2021; WCI Interviewee 2, n. 68 above.

Entry into C40 also entails costs, though not in the form of membership fees. By accepting philanthropic and public funding, C40 ensures that cities are not financially burdened by their membership.⁷⁰ However, cities wishing to join must demonstrate achievements and potential in meaningful climate solutions, articulate the benefits they expect from affiliating with C40, and adhere to its membership standards.⁷¹ The funding model enables C40 to prioritize quality over quantity in member selection, capping cities at 100 to maintain high service standards.⁷² With membership approaching this cap, gaining a place in C40 has become an ambitious pursuit, unlike more inclusive networks such as the International Council for Local Environmental Initiatives (ICLEI).⁷³ Beyond rationalist considerations of creating entry costs and restricting membership for exclusive services, C40 also demonstrates a constructivist approach that reinforces commitment and action. It ties membership to shared understandings, norms, and identities that define its members, with the meaning of membership evolving alongside the club's purposes. Initially focused on using the voices and actions of the world's most significant cities to combat climate change,⁷⁴ C40 has since expanded to include cities from more diverse regions and contexts.⁷⁵ Its funding model and virtuous member base support its ability to cherry-pick cities that are more likely to share and strengthen the club's climate targets.⁷⁶

C40 adopts a more centralized approach than the WCI in setting emissions reduction targets. Its performance-based standards mandate member adherence,⁷⁷ centring around aligning climate action plans with the Paris Agreement's 1.5°C target, reporting annual GHG emissions and climate action, and actively participating in C40 initiatives.⁷⁸ While meeting these standards entails costs, this self-regulatory

⁷⁰ C40 Interviewee 2, 'C40 Interview', 23 Nov. 2021; C40 Interviewee 10, 'C40 Interview', 11 May 2022; C40, 'C40 Annual Report 2020', 2021, p. 16, available at: https://www.c40.org/wp-content/uploads/2021/11/C40_Annual_Report_2020_vMay2021_lightfile.pdf; C40, 'C40 Annual Report 2022', 2023, pp. 4, 14, available at: https://www.c40.org/wp-content/uploads/2023/03/C40-Cities-Annual-Report-2022_Published-Online-31-Mar-2023.pdf.

⁷¹ Lin, n. 15 above, p. 116; C40 Interviewee 8, 'C40 Interview', 8 Apr. 2022.

⁷² C40 Interviewee 2, n. 70 above; C40 Interviewee 3, 'C40 Interview', 19 Dec. 2021; C40 Interviewee 8, n. 71 above; C40 Interviewee 9, 'C40 Interview', 27 Apr. 2022.

⁷³ ICLEI connects over 2,500 local and regional governments: ICLEI, 'About ICLEI', available at: https://iclei.org/about_iclei_2.

⁷⁴ C40 Cities Climate Leadership Group Inc., 'Annual Filing for Charitable Organizations' (C40 Annual Filing), 2019, p. 48, available at: [https://www.charitiesnys.com/RegistrySearch/show_details.jsp?id=\[25AF6E78-2E9A-419F-AD14-950C4F925147\]](https://www.charitiesnys.com/RegistrySearch/show_details.jsp?id=[25AF6E78-2E9A-419F-AD14-950C4F925147]).

⁷⁵ C40 now targets megacities and innovator cities. Megacities have a current or projected population exceeding three million by 2030. Innovator cities, despite their smaller population and size, are recognized for exceptional climate leadership; see 'C40 Cities Membership', n. 54 above; C40, 'C40 Announces New Guidelines for Membership Categories', 3 Oct. 2012, available at: https://web.archive.org/web/20130515113254/http://c40.org/media/press_releases/press-release-c40-announces-new-guidelines-for-membership-categories.

⁷⁶ See, e.g., Aust, n. 52 above, p. 261; Lin, n. 15 above, p. 116.

⁷⁷ C40 Annual Report 2022, n. 70 above, p. 4; C40 Interviewee 3, n. 72 above.

⁷⁸ C40 Interviewee 2, n. 70 above; C40 Interviewee 4, 'C40 Interview', 10 Mar. 2022; C40 Interviewee 5, 'C40 Interview', 15 Mar. 2022. See further C40 Leadership Standards, n. 56 above; 'C40 Participation – Letter from Mark Watts, Executive Director, C40 Cities Climate Leadership Group' (C40 Participation – Letter), 2019, p. 2, available at: <https://vancouver.ca/files/cov/2019-02-04-c40-participation-letter-from-mark-watts-executive-director-c40.pdf>.

framework allows flexibility in how members achieve benchmarks and tailor their programmes. C40 adjusts scrutiny based on issue areas, regional contexts, emissions levels, and GDP, with maintaining a compliant climate action plan as the primary factor influencing membership status.⁷⁹ By the end of 2022, C40 assessed that 69 out of its 96 members had plans aligned with the 1.5°C target, with the remaining cities completing or updating their plans. Chinese cities follow a different evaluation process, initially drafting research reports that are eventually integrated into public policies.⁸⁰ This flexibility reflects the constructivist notion that translating climate commitments should consider the economic, political, social, and cultural contexts in which they are implemented. C40's strict member selection criteria, combined with additional support for less active cities,⁸¹ facilitate the continued generation of shared understandings, norms, and identities among members. Nevertheless, C40 falls short in publicly sharing the rubrics and results of its annual evaluations, which raises questions about the integrity of these evaluations and C40's ability to address disparities in commitment, performance, and potential shirking.

4. Functions

4.1. Producing Public Benefits

Climate clubs hold potential in reducing emissions, but claiming their direct contribution requires further evidence. In the early years of the WCI, members crafted a regional strategy to achieve a 15% emissions reduction from 2005 levels by 2020, pivoting around developing cap-and-trade programmes and robust regional markets for emissions trading.⁸² This collaboration was crucial in the absence of decisive federal actions in the US and Canada.⁸³ Presently, instead of setting explicit targets, the WCI supports its members' carbon markets, which capped 374 megatonnes of carbon dioxide equivalent (MtCO₂ eq) GHG emissions in 2022 and covered 75% of their economy-wide emissions. The streamlined administration of WCI Inc. facilitates operational discussions and consistently delivers required services, technical expertise, reliable IT solutions, and strategic direction.⁸⁴

C40, in turn, reported that its initiatives have led to GHG emissions reduction and air quality improvement. North American cities achieved a 14% emissions reduction from 2015 to 2022, while Chinese cities saw a 38% drop in particulate matter 2.5

⁷⁹ C40 & Arup, n. 56 above; C40 Interviewee 2, n. 70 above; C40 Interviewee 4, n. 78 above.

⁸⁰ C40 Annual Report 2022, n. 70 above, p. 7. See also C40, 'Mapped: Cities with a Climate Action Plan', Jan. 2022, available at: https://www.c40knowledgehub.org/s/article/Mapped-Cities-with-a-climate-action-plan?language=en_US.

⁸¹ Lin, n. 15 above, p. 110.

⁸² WCI Program Design, n. 65 above, pp. 1–2.

⁸³ D.V. Wright, 'Cross-Border Constraints on Climate Change Agreements: Legal Risks in the California-Quebec Cap-and-Trade Linkage' (2016) 46(6) *Environmental Law Reporter*, pp. 10478–95, at 10480; M.J. Glennon & R.D. Sloane, *Foreign Affairs Federalism: The Myth of National Exclusivity* (Oxford University Press, 2016), pp. 62–3.

⁸⁴ WCI, Inc., 'Our Work', available at: <https://wci-inc.org>; WCI Inc. 2022 Annual Report, n. 53 above, pp. 3, 12–3; WCI Interviewee 3, n. 65 above.

(PM2.5) concentration between 2015 and 2021.⁸⁵ However, C40 does not provide concrete data that directly links these achievements to its membership, reflecting the difficulty noted in previous research of quantifying the climate impacts of cities joining transnational initiatives.⁸⁶ There is concern that C40 publications may prematurely declare their solutions to be successful without substantial evidence.⁸⁷ The achievements of C40 cities might also be indicative of the club's selective membership more than its direct impact.

My interviews confirmed the positive contribution of the WCI to members' emissions reduction efforts, with its cap-and-trade discussions proving valuable for advancing thinking, learning, and programme implementation.⁸⁸ WCI Inc. was praised for improving programme cost-effectiveness and ensuring target achievement.⁸⁹ Jurisdictions carefully weighed the benefits and drawbacks before deciding to join, stay in, or leave the WCI, based on their climate targets and chosen strategies.⁹⁰ Feedback on C40 was mixed. An interviewee from a southern Chinese city felt that the impact of C40 was less substantial than expected, though its expertise helped the city to chart more structured climate solutions.⁹¹ This caution was echoed in Phoenix, where extreme heat and water scarcity have driven active municipal responses. Nevertheless, C40 accelerated the integration by Phoenix of a consumption-based approach to tracing GHG emissions.⁹² An interviewee from C40 doubted that member cities could have reached their current progress without the club's support, observing a tendency for cities to claim full credit for policy achievements without acknowledging C40's contribution.⁹³

Beyond emissions reduction, climate clubs contribute to climate governance through political dialogue and support, information sharing, capacity building, and norm development. The WCI mainly adopts a rationalist approach in performing these functions. The club's stability is intertwined with its members' political interests. California and Quebec have consistently demonstrated firm commitments to carbon pricing. However, political shifts present challenges, as seen when Ontario's leadership

⁸⁵ C40 Annual Report 2022, n. 70 above, p. 9.

⁸⁶ A. Hsu et al., 'A Research Roadmap for Quantifying Non-State and Subnational Climate Mitigation Action' (2019) 9 *Nature Climate Change*, pp. 11–7; Kuramochi et al., n. 36 above, p. 276; Patt et al., n. 20 above, p. 1513.

⁸⁷ M. Heikkinen, T. Ylä-Anttila & S. Juhola, 'Incremental, Reformistic or Transformational: What Kind of Change Do C40 Cities Advocate to Deal with Climate Change?' (2019) 21(1) *Journal of Environmental Policy & Planning*, pp. 90–103, at 99.

⁸⁸ WCI Interviewee 2, n. 68 above. However, it is worth noting the weaknesses of carbon markets identified by other scholars, such as the over-allocation of compliance instruments that impedes sufficient emissions reductions and the disconnect between generating economic exchange value and reducing emissions; see, e.g., D. Cullenward, M. Inman & M.D. Mastrandrea, 'Tracking Banking in the Western Climate Initiative Cap-and-Trade Program' (2019) 14 *Environmental Research Letters*, article 124037; J. Knox-Hayes, 'The Spatial and Temporal Dynamics of Value in Financialization: Analysis of the Infrastructure of Carbon Markets' (2013) 50 *Geoforum*, pp. 117–28.

⁸⁹ WCI Interviewee 1, n. 69 above.

⁹⁰ WCI Interviewee 3, n. 65 above.

⁹¹ C40 Interviewee 5, n. 78 above.

⁹² C40 Interviewee 8, n. 71 above.

⁹³ C40 Interviewee 9, n. 72 above.

change in 2018 dramatically altered its climate policy. Ontario's exit disrupted the WCI cost-sharing balance, escalating the financial burden on remaining members.⁹⁴ In response, the WCI improved its contracting practices to instil greater certainty and reduce interest asymmetries, including clearer withdrawal and notification requirements.⁹⁵

The WCI supports the exchange of cost-effective climate solutions to bridge information gaps and facilitate collaborative learning among members. This exchange also manifests in peer-review processes that refine monitoring, reporting, and verification (MRV) standards, ensuring uniformity and environmental integrity across linked programmes.⁹⁶ More than a knowledge repository, the WCI equips members with the expertise and technical assistance needed to develop effective programmes.⁹⁷ The shift from a broad regional strategy to specialized carbon-market management reflects the rationalist idea of prioritizing interests and strengths to overcome capacity constraints.⁹⁸ Established members support newcomers to elevate collective proficiency. Notably, Nova Scotia's WCI membership prompted an extensive capacity-building journey, quickly achieving a commendable level of professionalism.⁹⁹

The WCI's norm development for cap-and-trade implementation and member interactions directly addresses collaboration and coordination challenges.¹⁰⁰ It promotes standardized solutions for emissions reduction by implementing core programme designs, such as declining emissions caps, reliable MRV, and rigorous oversight, to ensure market stability and integrity across members.¹⁰¹ These club norms foster uniformity and autonomy, helping members to achieve necessary coordination within the WCI framework while maintaining localized authority over

⁹⁴ WCI Interviewee 1, n. 69 above; WCI Interviewee 2, n. 68 above. See also C. Carmody, *A Guide to Emissions Trading under the Western Climate Initiative* (Centre for International Governance Innovation, 2019), p. 102; E. Lachapelle & S. Kiss, 'Opposition to Carbon Pricing and Right-Wing Populism: Ontario's 2018 General Election' (2019) 28(5) *Environmental Politics*, pp. 970–6.

⁹⁵ WCI Interviewee 2, n. 68 above. For the examples see Government of Quebec & Western Climate Initiative, Inc., Agreement on the Provision of Financial Assistance in the Amount of \$ 2,240,099 US to Finance the Western Climate Initiative, Inc. over Its Fiscal Years 2022 and 2023 (Quebec Funding Agreement), 24 Mar. 2022, available at: https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/fundingagreement-quebec_2022-2023-en.pdf; State of Washington & Western Climate Initiative, Inc., Standard Agreement, 1 Jan. 2022, available at: <https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/fundingagreementwashington-20211217-en-signatureonfile.pdf>.

⁹⁶ WCI Interviewee 2, n. 68 above; Chen, n. 69 above, pp. 333–4; M. Mehling, 'Linking of Emissions Trading Schemes', in D. Freestone & C. Streck (eds), *Legal Aspects of Carbon Trading: Kyoto, Copenhagen, and Beyond* (Oxford University Press, 2009), pp. 108–33, at 110.

⁹⁷ WCI Interviewee 2, n. 68 above.

⁹⁸ See, e.g., R.G. González Cosío, 'Social Constructivism and Capacity Building for Environmental Governance' (1998) 3(3) *International Planning Studies*, pp. 367–89, at 382, 384–5 (focusing on environmental governance).

⁹⁹ WCI Interviewee 3, n. 65 above.

¹⁰⁰ See, e.g., Abbott & Snidal, n. 45 above, p. 424 (discussing a rationalist approach to international agreement making).

¹⁰¹ WCI Program Design, n. 65 above, p. 5.

compliance and enforcement.¹⁰² By mitigating uncertainty, lowering transaction costs, and encouraging compliance, these norms strategically reshape incentives to enhance carbon market performance.¹⁰³

C40, by contrast, tends to reflect a constructivist approach to enhancing political dialogue and support. Mayoral leadership is at the heart of C40.¹⁰⁴ Its membership standards – shaped by shared beliefs, values, dialogues, and persuasion¹⁰⁵ – continuously raise the bar, urging local leaders to uphold stringent climate policies and empowering city staff to execute them.¹⁰⁶ C40 leverages its global influence to provide diplomatic and communication support,¹⁰⁷ creating a community of practice that connects municipal endeavours and pools their collective influence.¹⁰⁸ By elevating the credibility of local initiatives, this community makes it easier and more legitimate for cities to pursue both individual and shared climate targets.¹⁰⁹ While C40 admits cities that demonstrate climate leadership, shifts in city priorities as a result of mayoral changes can affect their engagement levels. Still, C40's broad definition of active participation ensures that members remain involved despite wavering local political support,¹¹⁰ demonstrating the club's commitment to helping cities in navigating political barriers to climate action.¹¹¹ Strategically designed programmes such as high-impact accelerators and green transition financing¹¹² provide a less adversarial context for promoting emissions reduction.¹¹³ Furthermore, by channeling transnational dialogues and interactions among local officials, C40 ensures that municipal cooperation continues despite geopolitical tensions, including strained relations between China and the US.¹¹⁴

¹⁰² WCI, 'Design Recommendations for the WCI Regional Cap-and-Trade Program' (WCI Design Recommendations), 23 Sept. 2008, amended 13 Mar. 2009, p. 47, available at: <https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/documents/en/wci-program-design-archive/WCI-DesignRecommendations-20090313-EN.pdf>; WCI Interviewee 1, n. 69 above.

¹⁰³ See further B. Simmons, 'International Law and International Relations', in G.A. Caldeira, R.D. Kelemen & K.E. Whittington (eds), *The Oxford Handbook of Law and Politics* (Oxford University Press, 2008), pp. 187–208, at 193; C. Bicchieri, *Norms in the Wild: How to Diagnose, Measure, and Change Social Norms* (Oxford University Press, 2017), Ch. 1.

¹⁰⁴ C40 Interviewee 2, n. 70 above; C40 Interviewee 8, n. 71 above.

¹⁰⁵ For the constructivist approach see further Ellis, n. 21 above, p. 13; T. Risse, "'Let's Argue!': Communicative Action in World Politics' (2000) 54(1) *International Organization*, pp. 1–39, at 1–2.

¹⁰⁶ C40 Interviewee 4, n. 78 above; 'C40 Participation – Letter', n. 78 above, p. 3.

¹⁰⁷ J. Ciardullo, 'C40 Interview (Email)', 4 Apr. 2022; C40 Interviewee 9, n. 72 above; C40, 'Global Diplomacy & Advocacy', available at: <https://www.c40.org/what-we-do/influencing-the-global-agenda/global-diplomacy-advocacy>.

¹⁰⁸ C40 Interviewee 2, n. 70 above; C40 Interviewee 8, n. 71 above (highlighting this value for cities like Toronto and Phoenix). See also Lin, n. 15 above, pp. 112–3.

¹⁰⁹ C40 Interviewee 4, n. 78 above. See further M. Mintrom & J. Luetjens, 'Policy Entrepreneurs and Problem Framing: The Case of Climate Change' (2017) 35(8) *Environment and Planning C: Politics and Space*, pp. 1362–77, at 1372.

¹¹⁰ C40 Interviewee 6, 'C40 Interview (Email)', 21 Mar. 2022.

¹¹¹ Dubash et al., n. 15 above, p. 1369.

¹¹² C40, 'High-Impact Accelerators', available at: <https://www.c40.org/what-we-do/raising-climate-ambition/high-impact-accelerators>; C40, 'Financing the Green Transition', available at: <https://www.c40.org/what-we-do/influencing-the-global-agenda/financing-the-green-transition>.

¹¹³ Lin, n. 15 above, pp. 129, 153.

¹¹⁴ C40 Interviewee 3, n. 72 above.

The C40 approach to information sharing and capacity building entails constructivist elements. Its creation of various interaction channels – which include summits, working meetings, targeted programmes, and policy networks – enables members to exchange diverse perspectives and proven solutions towards consensus building and shifts in practice.¹¹⁵ C40's capacity building is intertwined with the regional and technological contexts of its member cities, which influences how problems and solutions are constructed. The C40 Climate Action Implementation Programme helps cities to integrate climate action plans into their governance, planning, and decision-making structures.¹¹⁶ In China, C40's Beijing Representative Office translates and adapts global climate strategies to local needs.¹¹⁷ Chinese cities use its research and technical frameworks as a reference to balance economic growth with dual carbon targets¹¹⁸ – though challenges persist, such as confusion among local users arising from out-of-context or overly complex C40 materials and terminology.¹¹⁹ In the area of technology, C40 promotes sector-specific training through its technical networks,¹²⁰ unifying cities with shared interests and challenges.¹²¹

C40 constructs club norms through a community of practice, where member cities harness their authority and collective potential for climate action while maintaining accountability. The governance of C40 is defined by its By-Laws,¹²² which are voluntary and lack legal sanctions for non-compliance. However, members typically adhere to the By-Laws, treating them as a form of self-regulation with carefully articulated provisions on organizational structure, responsibilities, and personnel.¹²³ The seriousness with which these rules are taken is illustrated by strict adherence to election protocols for the C40 Chair position.¹²⁴ Meanwhile, C40 collaborates with organizations like the World Bank, the World Resources Institute (WRI), and ICLEI to develop city-wide climate action planning and GHG accounting and reporting protocols.¹²⁵ These harmonized norms for data collection and disclosure, co-created

¹¹⁵ C40, 'C40 World Mayors Summit: Buenos Aires, 19–21 Oct. 2022', available at: <https://www.c40.org/events/summit-2022>; C40, 'Networks', available at: <https://www.c40.org/networks>; C40 Interviewee 8, n. 71 above; C40 Interviewee 9, n. 72 above; C40 Interviewee 11, 'C40 Interview', 1 Aug. 2022; Lin, n. 15 above, p. 106.

¹¹⁶ C40 Annual Report 2022, n. 70 above, p. 10.

¹¹⁷ C40, 'C40 Beijing Representative Office', available at: <https://www.c40.org/china-office>.

¹¹⁸ C40 Interviewee 3, n. 72 above.

¹¹⁹ C40 Interviewee 5, n. 78 above.

¹²⁰ See, e.g., C40, 'C40 Cities China Buildings Programme', available at: <https://www.c40.org/what-we-do/scaling-up-climate-action/energy-and-buildings/c40-cities-china-buildings-programme>.

¹²¹ C40 Interviewee 3, n. 72 above; C40 Interviewee 9, n. 72 above.

¹²² C40 Annual Filing, n. 74 above, p. 50; Articles of Association of C40 Cities Climate Leadership UK, 27 Feb. 2017, available at: <https://find-and-update.company-information.service.gov.uk/company/10401717/filing-history?page=2>.

¹²³ See, e.g., By-Laws of Cities Climate Leadership Group Inc., 2011, Arts I, IV–VI, XII, available at: https://www.charitiesnys.com/RegistrySearch/show_details.jsp?id={25AF6E78-2E9A-419F-AD14-950C4F925147}.

¹²⁴ C40 Interviewee 2, n. 70 above.

¹²⁵ Memorandum of Understanding between International Bank for Reconstruction and Development, International Development Association, International Finance Corporation and the C40 Cities Climate Leadership Group on Cooperation Relating to Climate Action in Cities (World Bank–C40 MOU), 1 June 2011, available at: <https://documents1.worldbank.org/curated/en/455201491251091242/pdf/>

by C40 cities and applied in their annual reports to the Carbon Disclosure Project (CDP), become practices that influence policymaking.¹²⁶ C40 cities become more connected through these norms, which they help to create and measure behaviour relevant to them, thereby shaping governance structures and their interests and identities.¹²⁷

4.2. Producing Club Benefits

I have categorized political dialogue, information sharing, capacity building, and norm development as producing public benefits because these governance activities can result in climate benefits from which nobody can be excluded.¹²⁸ For example, the WCI readily provides online access to its documents.¹²⁹ Its cap-and-trade recommendations not only serve as a blueprint for WCI members but can also be adapted to other jurisdictions with varying needs and administrative requirements.¹³⁰ C40 disseminates hands-on experiences and strategies beyond the club, with some members sharing knowledge with neighbouring and sister cities.¹³¹ C40's Knowledge Hub and active social media presence expand its outreach and contribute to global climate awareness.¹³² However, a climate club can transform incentive structures by shifting climate action benefits from public to private or hybrid, thus attracting and retaining members.¹³³ Those governance activities can yield benefits exclusive to club members, reflecting the intricate link and distinction between public and club benefits. Regular meetings strengthen member dialogue and connections, which can increase trust over time.¹³⁴ Knowledge and networks can be club benefits because only members gain full access to detailed performance data and the potential of different

MoU-C40-Cities.pdf; WRI, C40 & ICLEI, 'Global Protocol for Community-Scale Greenhouse Gas Emission Inventories: An Accounting and Reporting Standard for Cities', 2014, available at: https://ghgprotocol.org/sites/default/files/ghgp/standards/GHGP_GPC_0.pdf.

¹²⁶ Lin, n. 15 above, pp. 137–8, 150; Hsu et al., n. 86 above, p. 16 (suggesting that implementing uniform protocols is a positive step towards aggregating non-state contributions to global climate mitigation). See also B. Leffel, 'Toward Global Urban Climate Mitigation: Linking National and Polycentric Systems of Environmental Change' (2022) 8(1) *Sociology of Development*, pp. 111–37, at 117, 127 (noting that organizations like C40 diffuse climate policy expertise to cities).

¹²⁷ See further K.E. Davis, B. Kingsbury & S.E. Merry, 'Indicators as a Technology of Global Governance' (2012) 46(1) *Law & Society Review*, pp. 71–104, at 82.

¹²⁸ See, e.g., Unger, Mar & Gürtler, n. 2 above, p. 4.

¹²⁹ Available at: <https://wci-inc.org/documents>.

¹³⁰ WCI Design Recommendations, n. 102 above; WCI Program Design, n. 65 above; WCI Interviewee 2, n. 68 above.

¹³¹ C40 Interviewee 4, n. 78 above; C40 Interviewee 8, n. 71 above; see also Mintrom & Luetjens, n. 109 above, p. 1369.

¹³² C40, 'C40 Knowledge Hub', available at: <https://www.c40knowledgehub.org>; C40 Annual Report 2020, n. 70 above, p. 15; C40 Interviewee 9, n. 72 above; A. Sancino et al., 'What Can City Leaders Do for Climate Change? Insights from the C40 Cities Climate Leadership Group Network' (2022) 56(7) *Regional Studies*, pp. 1224–33, at 1225.

¹³³ Falkner, n. 4 above, pp. 91–2.

¹³⁴ Unger, Mar & Gürtler, n. 2 above, pp. 4–5; Stewart, Oppenheimer & Rudyk, 'Building Blocks', n. 17 above, p. 4.

technologies, techniques, and strategies.¹³⁵ Support in developing norms is often specific to the jurisdictions implementing them,¹³⁶ especially concerning climate adaptation.¹³⁷

Both the WCI and C40 provide a range of club benefits to motivate members to pursue climate action, in line with the rationalist assumption that changes to incentive structures can trigger behavioural changes, such as creating potent incentives for costly climate action.¹³⁸ Deviation or free riding would result in forfeiting club benefits, or even penalties.¹³⁹ The primary benefit of the WCI is economic. Its market-based solution transforms emissions into tradeable assets, designed to stimulate innovation in emissions reduction and minimize costs.¹⁴⁰ The WCI supports this with an efficient and scalable administrative model that improves programme management, market oversight, and risk mitigation, thereby reducing administrative costs compared to independent management by each jurisdiction.¹⁴¹ Linking programmes can bring further benefits, such as increased cross-jurisdictional communication, greater market liquidity, and lower compliance costs for businesses and consumers.¹⁴² These links carry risks, such that asymmetric emissions trading between California and Quebec significantly reduced costs in Quebec but barely affected California's carbon prices.¹⁴³

The economic benefit of C40 is not immediately apparent to all members. It adopts a targeted approach by identifying city needs, formulating solutions, and aiding in funding applications.¹⁴⁴ For example, the C40 Cities Finance Facility has supported 34 sustainable infrastructure projects in cities with lower GDPs.¹⁴⁵ By contrast, my interviewees noted that wealthier Chinese cities valued C40 more for its innovative ideas and solutions than for direct economic benefits.¹⁴⁶ The primary benefits that C40 promotes are shared expertise, knowledge, and resources (such as capacity-building meetings, networking opportunities, and pilot programmes), which might otherwise

¹³⁵ R.B. Stewart, M. Oppenheimer & B. Rudyk, 'Building Blocks for Global Climate Protection' (2013) 32 *Stanford Environmental Law Journal*, pp. 341–92, at 372.

¹³⁶ Unger, Mar & Gürtler, n. 2 above, p. 9.

¹³⁷ A. Michaelowa, 'Mitigation versus Adaptation: The Political Economy of Competition between Climate Policy Strategies and the Consequences for Developing Countries', Hamburg Institute of International Economics, HWWA Discussion Paper No. 153, 2001, p. 22, available at: <https://www.econstor.eu/bitstream/10419/19398/1/153.pdf>.

¹³⁸ Prakash & Potoski, n. 21 above, p. 41; Ellis, n. 21 above, pp. 2–3, 16, 36.

¹³⁹ Keohane & Victor, n. 4 above, p. 9.

¹⁴⁰ WCI Program Design, n. 65 above, p. 5; Quebec Funding Agreement, n. 95 above, Preamble, para. 1. See further S. Bogoević, *Emissions Trading Schemes: Markets, States and Law* (Hart, 2013), p. 30.

¹⁴¹ California Funding Agreement, n. 63 above, Exhibit A, para. 1; WCI Interviewee 2, n. 68 above; WCI Interviewee 3, n. 65 above; Patt et al., n. 20 above, p. 1458.

¹⁴² WCI Program Design, n. 65 above, pp. 5–6; Quebec Funding Agreement, n. 95 above, Preamble, para. 2; Washington State Department of Ecology, 'Cap-and-Invest Linkage' available at: <https://ecology.wa.gov/Air-Climate/Climate-Commitment-Act/Cap-and-invest/Linkage>; WCI Interviewee 2, n. 68 above. See further Patt et al., n. 20 above, pp. 1453, 1458.

¹⁴³ M. Purdon et al., 'Climate and Transportation Policy Sequencing in California and Quebec' (2021) 38(5) *Review of Policy Research*, pp. 596–630. See also D. Cullenward & D.G. Victor, *Making Climate Policy Work* (Polity Press, 2020), Ch. 6 (arguing that market links are 'rare, thin, and between similar systems').

¹⁴⁴ C40 Interviewee 2, n. 70 above; C40 Interviewee 9, n. 72 above.

¹⁴⁵ C40 Annual Report 2022, n. 70 above, p. 10.

¹⁴⁶ C40 Interviewee 3, n. 72 above; C40 Interviewee 5, n. 78 above.

be inaccessible to cities acting individually.¹⁴⁷ To disincentivize non-compliance, C40 can terminate membership, though this happens rarely,¹⁴⁸ or restrict inactive members from accessing the city adviser programme, technical assistance, reimbursed network workshops, external partnerships, and Steering Committee activities.¹⁴⁹

Climate clubs obligate or encourage members to adopt specific climate norms, a major benefit of which is reputational. Membership can lend legitimacy to commitments or shield them from criticism.¹⁵⁰ Governments recognize the value of a positive image among constituents and prospective businesses, which may enhance re-election prospects or attract investment.¹⁵¹ C40 is known for its demanding standards and selectivity, with nearly half of its members being capital cities,¹⁵² positioning it as a leader in climate initiatives and urban innovation.¹⁵³ Membership of C40 offers cities the opportunity to elevate their reputation by endorsing stringent policies and showcasing public commitments.¹⁵⁴ This signalling resembles a club benefit, inaccessible to non-members.¹⁵⁵ My interviewees recognized the reputational benefits that motivated cities to join C40.¹⁵⁶ Some mayors used this affiliation to show leadership in climate action to their constituents.¹⁵⁷ The appeal of C40 membership in China was particularly linked to its global recognition and the sense of accomplishment it instilled.¹⁵⁸

Even if club members commit to specific policies, external stakeholders may question the credibility of club membership as an indicator of genuine commitment without tangible evidence of behavioural changes and policy fulfilment.¹⁵⁹ When

¹⁴⁷ C40 Interviewee 4, n. 78 above; C40 Interviewee 5, n. 78 above; Ciardullo, n. 107 above. See also C40 Annual Report 2022, n. 70 above, p. 8; Lin, n. 15 above, pp. 106–9.

¹⁴⁸ Cairo, Caracas, Changwon, Jaipur, and Moscow are examples of cities initially listed as inactive before losing their C40 membership. I reviewed C40 membership status from 2014 to 2023 using the Internet Archive: ‘Wayback Machine’, available at: https://web.archive.org/web/20180401000000*/https://www.c40.org/cities.

¹⁴⁹ C40 Participation – Letter, n. 78 above, p. 11.

¹⁵⁰ Ko & Prakash, n. 51, p. 6; Z. Elkins & B. Simmons, ‘On Waves, Clusters, and Diffusion: A Conceptual Framework’ (2005) 598(1) *The Annals of the American Academy of Political and Social Science*, pp. 33–51, at 39.

¹⁵¹ B.G. Rabe, M. Roman & A.N. Dobelis, ‘State Competition as a Source Driving Climate Change Mitigation’ (2005) 14(1) *New York University Environmental Law Journal*, pp. 1–53, at 13.

¹⁵² T. Lee, ‘Global Cities and Transnational Climate Change Networks’ (2013) 13(1) *Global Environmental Politics*, pp. 108–27, at 117 (noting that capital cities hold significant political and economic sway in motivating partnerships).

¹⁵³ C40 Interviewee 3, n. 72 above; Sancino et al., n. 132 above, p. 1230.

¹⁵⁴ S.C. Berrueta & J. van der Heijden, ‘Trading Off Benefits and Requirements: How Do City Networks Attract Cities to Their Voluntary Environmental Programmes?’ (2021) 31(5) *Environmental Policy and Governance*, pp. 451–62, at 453.

¹⁵⁵ Ko & Prakash, n. 51 above, p. 6.

¹⁵⁶ C40 Interviewee 1, ‘C40 Interview’, 19 Nov. 2021; C40 Interviewee 2, n. 70 above; C40 Interviewee 3, n. 72 above; C40 Interviewee 5, n. 78 above; C40 Interviewee 8, n. 71 above.

¹⁵⁷ C40 Interviewee 2, n. 70 above.

¹⁵⁸ C40 Interviewee 3, n. 72 above; C40 Interviewee 5, n. 78 above.

¹⁵⁹ Ko & Prakash, n. 51 above, p. 2; M. Potoski, ‘Green Clubs in Building Block Climate Change Regimes’ (2017) 144(1) *Climatic Change*, pp. 53–63, at 57–8.

membership conveys a broad reputation for climate stewardship, stakeholders may seek details of specific achievements.¹⁶⁰ Research suggests that not all C40 cities have developed climate action plans with clear or comparable quantitative targets. Variations in baseline years and target expressions complicate comparisons of member performance.¹⁶¹ C40 does not provide concrete evidence of its direct impact on emissions reductions; nor does it publicly share its evaluation rubrics and results for member adherence. This lack of transparency, while reflecting the club's closed-door, member-only character, limits the reputational pressure it can exert on members. Consequently, it becomes difficult to differentiate leading cities from laggards and motivate the latter to improve.

The provision of club benefits can be better achieved by bridging the rationalist approach with constructivist insights that illuminate how a club's incentive-shifting measures evolve, gain acceptance, and are supported by club norms.¹⁶² As members constitute their interests through processes of perceiving, defining, and modifying interests, the club should enable ongoing negotiation, deep collaboration, and socialization among members with varied priorities and engagement levels.¹⁶³ These interactions can reinforce or shift shared understandings, cultivating a peer-supportive community that increases the likelihood of implementing club norms for enhanced credibility and reputation among stakeholders.¹⁶⁴

For the WCI, initiators like California and Quebec gained first-mover advantages by advancing cap-and-trade norms and shaping climate policies and standards. This positioned them favourably in the competition to determine which carbon pricing scheme could dominate North America.¹⁶⁵ However, opinions on the reputational benefits of the WCI varied among my interviewees, depending on the climate profile and expertise of each jurisdiction and its engagement level in the club. One interviewee praised the mutual benefits of the WCI growing stronger with each new member, while the latter gains credibility and resources from an established organization.¹⁶⁶ Another interviewee questioned the notion of reputational benefits from WCI membership.¹⁶⁷ Moreover, Ontario's membership and its cap-and-trade link with California and Quebec were seen initially as a vehicle to position its industries as leaders and attract clean technology investments, but its abrupt exit from the WCI, following a political leadership change and its subsequently diminished role in advancing climate norms, may have limited its ability to meet these expectations.¹⁶⁸

¹⁶⁰ Ko & Prakash, n. 51 above, p. 15.

¹⁶¹ Lin, n. 15 above, p. 117.

¹⁶² Ellis, n. 21 above, pp. 2–3, 20.

¹⁶³ Ibid., pp. 16–7; Simmons, n. 103 above, p. 202. See also T. Lee, 'Network Comparison of Socialization, Learning and Collaboration in the C40 Cities Climate Group' (2019) 21(1) *Journal of Environmental Policy & Planning*, pp. 104–15.

¹⁶⁴ See, e.g., Brunnée & Toope, n. 13 above, pp. 63–4; Hsu et al., n. 86 above, p. 13.

¹⁶⁵ For first-mover benefits see Stewart, Oppenheimer & Rudyk, 'Building Blocks', n. 17 above, p. 6.

¹⁶⁶ WCI Interviewee 3, n. 65 above.

¹⁶⁷ WCI Interviewee 2, n. 68 above.

¹⁶⁸ WCI Interviewee 1, n. 69 above. See also S. McCarthy, 'Cancellation of German-Owned Ontario Wind Project Prompts Warning from Berlin', *The Globe and Mail*, 23 July 2018, available at: <https://www.the>

5. Legal Foundations

This section examines the legal foundations of subnational climate clubs, which strengthen member selection and management while sustaining benefit generation and community building for climate action. As these clubs interact with legal regimes across multiple governance levels, they must adeptly navigate regulatory frameworks that have an impact on their operation and legitimacy, and avoid judicial challenges that could annul their efforts. The authority and legal competence of club members determine the nature of the transnational partnerships they can forge – whether by enacting laws or by-laws, signing contracts or memorandums of understanding (MOUs), or undertaking joint activities. The division of power between national and subnational governments over climate governance and foreign policy, which varies by country, significantly affects the execution of club pledges. Clubs must manage these complexities by balancing climate ambitions with each member's legal constraints and geopolitical circumstances. They do not merely exist within law and legal frameworks; they contribute to the development, diffusion, and implementation of legal norms, as further discussed in the following.

5.1. Club Norms on a Hard–Soft Law Continuum

What the law means for climate clubs is not always straightforward. The rationalist concept of ‘legalization’ provides a lens through which a hard–soft law continuum can capture the varied forms of club normativity, and shows the benefits and costs of choosing these norms.¹⁶⁹ It features three institutional characteristics – obligation, precision, and delegation – that impose legal constraints on governments.¹⁷⁰ Hard law consists of legally binding obligations that are precise or can be clarified through adjudication or detailed regulations, while delegating authority for interpretation and implementation. In contrast, soft law emerges when any of these dimensions are weakened, individually or in combination. Soft law thus characterizes an extensive spectrum of departures from hard law, and from purely political arrangements where legalization is mostly lacking.¹⁷¹

The evolution of the WCI illuminates the strategic alignment of members towards ambitious climate goals and the solidity of hard-law commitments via meticulous contracting practices. The WCI obligates members to provide financial and operational support, with jurisdiction-specific funding agreements and its By-Laws establishing mutual obligations, financial contributions, and protocols for dispute resolution and withdrawal.¹⁷² The funding agreements particularly exhibit hard-law

globeandmail.com/business/article-cancellation-of-german-owned-ontario-wind-project-prompts-warning-from- Carmody, n. 94 above, p. 98; Keohane, Petsonk & Hanafi, n. 55 above, pp. 82–3, 89.

¹⁶⁹ J. Goldstein et al., ‘Introduction: Legalization and World Politics’ (2000) 54(3) *International Organization*, pp. 385–99; K.W. Abbott et al., ‘The Concept of Legalization’ (2000) 54(3) *International Organization*, pp. 401–19, at 413; Abbott & Snidal, n. 45 above, p. 422.

¹⁷⁰ Goldstein et al., n. 169 above, p. 386.

¹⁷¹ Abbott & Snidal, n. 45 above, pp. 421–2; Abbott et al., n. 169 above, pp. 401–2.

¹⁷² See, e.g., WCI Inc. By-Laws, n. 64 above; Quebec Funding Agreement, n. 95 above; Government of Ontario & Western Climate Initiative, Inc., Agreement to Support the Operations of the Western

attributes in their precise and enforceable obligations. This hard-law emphasis became indispensable after Ontario terminated its cap-and-trade link with California and Quebec without fulfilling the terms of their linking agreement, leaving California and Quebec without a mechanism to impose penalties. Ontario's action also made its emissions allowances non-tradeable, further affecting stakeholders involved in these transactions.¹⁷³ In response, WCI Inc. introduced more stringent contact timing provisions in subsequent funding agreements to protect member interests and maintain the club's integrity.¹⁷⁴ Governed by domestic contract law,¹⁷⁵ these funding agreements provide clearer legal safeguards than linking agreements.

The linking agreement between California, Quebec, and Ontario leaned towards hard law, as its contractual or treaty-like provisions on withdrawal procedures, amendments, accession, resolution of differences, and coming into force signified highly formalized commitments for strategically managing members in linked programmes.¹⁷⁶ The text's assertiveness, with 'shall' appearing 55 times, might suggest binding obligations. However, these obligations were primarily procedural, focusing on clear communication and cooperation under each jurisdiction's legal framework.¹⁷⁷ Recognizing the significant costs of hard law, such as restricting behaviour and sovereignty,¹⁷⁸ the three jurisdictions relaxed the legalization parameters of their linking agreement. They affirmed that the agreement would not undermine their national obligations or sovereign rights over legislation and regulations.¹⁷⁹ Decisions on programme linkages were thus subject to the legal and policy assessments of each jurisdiction.¹⁸⁰ This pivot to reciprocal commitments, while softening the rigidity of hard law, also undercut its benefits in strengthening political strategies, commitment credibility, and solutions for incomplete contracting,¹⁸¹ culminating in inadequate remedies following Ontario's exit.

The WCI promotes aspirational climate commitments indicative of soft-law characteristics, notably illustrated by the Western Regional Climate Action Initiative Agreement.¹⁸² Neither legally binding nor enforceable, this agreement avoided the

Climate Initiative, Inc. (Ontario Funding Agreement), 1 Jan. 2016, available at: <https://wcitestbucket.s3.us-east-2.amazonaws.com/amazon-s3-bucket/documents/en/jurisdiction-agreements/FundingAgreement-Ontario-20162017-EN.pdf>.

¹⁷³ Carmody, n. 94 above, p. 30.

¹⁷⁴ WCI Interviewee 2, n. 68 above.

¹⁷⁵ See, e.g., Quebec Funding Agreement, n. 95 above, Art. 18; Ontario Funding Agreement, n. 172 above, Art. 1.09.

¹⁷⁶ California, Ontario & Quebec, Agreement on the Harmonization and Integration of Cap-and-Trade Programs for Reducing Greenhouse Gas Emissions (California, Ontario & Quebec Agreement), Quebec City (Canada), 22 Sept. 2017, Arts 17–20, 22, available at: https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/linkage/2017_linkage_agreement_ca-qc-on.pdf. See also Carmody, n. 94 above, p. 44.

¹⁷⁷ California, Ontario & Quebec Agreement, n. 176 above, Art. 11; Wright, n. 83 above, pp. 10490–1.

¹⁷⁸ Abbott & Snidal, n. 45 above, p. 422.

¹⁷⁹ California, Ontario & Quebec Agreement, n. 176 above, Preamble, para. 8.

¹⁸⁰ WCI Interviewee 1, n. 69 above; WCI Interviewee 2, n. 68 above. See further California Air Resources Board, 'Discussion of Findings Required by Government Code Section 12894', Jan. 2013, available at: <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2012/capandtrade12/2nd15dayatta6.pdf>.

¹⁸¹ Abbott & Snidal, n. 45 above, p. 422.

¹⁸² WCI Agreement, n. 65 above.

strict domestic scrutiny required for international treaties, laying the groundwork for the WCI partnership to partially fill political leadership voids when federal mandates for emissions reductions fell short. Partner jurisdictions voluntarily pledged to develop their cap-and-trade programmes and explore potential linkages.¹⁸³ As a soft-law instrument, the agreement mitigated some costs of hard law. Its flexibility in relaxing certain elements of legalization made it more attainable without surrendering the authority of partnering jurisdictions to a higher governing entity or enhancing subnational power to the point of challenging federal authority, which could provoke legal and constitutional controversies. This softer legalization managed uncertainty by initiating processes that enabled members to progressively learn about the agreement's impact.¹⁸⁴

Compared to the WCI, C40 has developed a richer set of club norms along the hard-soft law continuum. At the hard-law end, C40 operates through the incorporation of non-profit entities committed to rigorous domestic legal compliance, with charitable status shielding philanthropic donations from taxation.¹⁸⁵ C40 leverages MOUs to confirm partnerships with members and establish goals and terms with public and private partners.¹⁸⁶ Embodying softer legalization, these MOUs facilitate compromise and mutually beneficial cooperation among stakeholders with diverse interests and power.¹⁸⁷ They are versatile tools for managing agreements ranging from aspirational commitments to legal obligations. This flexibility, combined with the potential to enforce certain provisions through domestic courts or international arbitration when specified,¹⁸⁸ offers a less intimidating path for promoting collaborations than formal legal agreements.¹⁸⁹

C40 develops membership standards to guide climate action progress. Its Leadership Standards align member activities and advocate impactful measures.¹⁹⁰ These standards, framed in broad, promotional language, give members considerable flexibility in compliance and are at the softer end of the continuum, with lower degrees of obligation, precision, and delegation compared with the MOUs. C40 also uses letters, declarations, and other supporting documents. Upon joining, cities sign a commitment letter promising compliance with C40 standards.¹⁹¹ C40 rebranded its

¹⁸³ Ibid.; WCI Interviewee 1, n. 69 above.

¹⁸⁴ For more about soft law see Abbott & Snidal, n. 45 above, p. 423.

¹⁸⁵ C40 Interviewee 2, n. 70 above; C40 Interviewee 10, n. 70 above.

¹⁸⁶ See, e.g., City of Toronto & C40 Cities Climate Leadership Group Inc., Proposed Memorandum of Understanding, 2015, Arts 9–10, available at: <https://www.toronto.ca/legdocs/mmis/2015/ex/bgrd/ba ckgroundfile-78772.pdf>; World Bank–C40 MOU, n. 125 above.

¹⁸⁷ Abbott & Snidal, n. 45 above, p. 423.

¹⁸⁸ See, e.g., City of Cape Town & C40 Cities Climate Leadership Group Inc., Memorandum of Understanding, 3 Mar. 2015, Arts 9–10, available at: <https://resource.capetown.gov.za/documentcentre/Documents/Agreements%20and%20contracts/C40%20MOU.pdf>.

¹⁸⁹ C40 Interviewee 10, n. 70 above.

¹⁹⁰ C40 Leadership Standards, n. 56 above.

¹⁹¹ C40 Interviewee 1, n. 156 above; C40 Interviewee 2, n. 70 above; C40 Interviewee 5, n. 78 above.

declarations as ‘accelerators’, in which mayors pledge specific climate actions to operationalize the C40 goals.¹⁹² Such pledges are less stringent than the Leadership Standards,¹⁹³ and joining an accelerator is additional; cities may withdraw without affecting membership. In fact, these documents may fall outside the hard–soft law continuum altogether, reflecting typical political arrangements where legalization is mostly absent.

The rationalist approach provides an initial framework to clarify the benefits and costs of adopting club norms with varying degrees of legalization. The WCI and C40 use hard law for funding and operations to enhance member services, provide club benefits, and ensure legal protection and enforcement. However, developing club norms solely through legalization risks missing the subtleties inherent in the diverse legal normativity that underpins club-based climate commitments. These commitments generally stand at the softer end or outside the legalization continuum. Focusing on obligation, precision, and delegation in individual club norms may not adequately capture how these norms interconnect. Yet these interconnections, along with the unique strengths and limitations of each norm, may collectively sustain climate governance.

5.2. Constructivist Approaches to Club Lawmaking

Integrating constructivist elements into the study of subnational climate clubs enriches the development and influence of club norms by emphasizing member interactions, club structures, and procedural aspects of law. Constructivism moves beyond rigid legalization parameters and recognizes the value of club norms – even those outside the legalization continuum – and their interconnections in steering climate governance. The interactional theory of law conceptualizes law as a horizontal, reciprocal relationship, reinforced by legality requirements that generate a sense of commitment among those it addresses.¹⁹⁴ This interactional law can be envisioned as a distinct community of practice in which club members share an understanding of ‘what they are doing and why’.¹⁹⁵ Only when a club practice aligns with certain legality requirements can shared legal understandings – whether procedural, substantive, ambitious, or modest – be established, sustained, or modified.¹⁹⁶ These requirements include ‘generality, promulgation, non-retroactivity, clarity, non-contradiction, not asking the impossible, constancy, and congruence between rules and official action’.¹⁹⁷ Positive or hard law may structure a community by upholding requirements like clarity

¹⁹² C40 intended this rebranding to convey the urgency of tackling climate change; see further C40, ‘High-Impact Accelerators’, n. 112 above.

¹⁹³ C40 Interviewee 3, n. 72 above.

¹⁹⁴ See especially Brunnée & Toope, n. 13 above, p. 27–8; L.L. Fuller, *The Morality of Law* (Yale University Press, Rev. edn, 1969), Ch. II.

¹⁹⁵ E. Adler, *Communitarian International Relations: The Epistemic Foundations of International Relations* (Routledge, 2005), p. 22; Brunnée & Toope, n. 13 above, p. 45.

¹⁹⁶ See further Brunnée & Toope, n. 13 above, p. 69.

¹⁹⁷ *Ibid.*, p. 6.

and constancy, but without active member participation and interactions, such law risks becoming ‘dead letter’.¹⁹⁸

The WCI’s cap-and-trade recommendations embody constructivist lawmaking elements, evolving through repeated member interactions and influencing their behaviour. These recommendations, which articulate member priorities and achieve broad consensus on policy designs, have been integrated into the regulatory frameworks of WCI members.¹⁹⁹ Applauded as ‘highly useful’,²⁰⁰ they establish a standard framework with unified rules upholding carbon market integrity through equivalent stringency across jurisdictions.²⁰¹ They are advisory in nature, respect each jurisdiction’s sovereignty, and allow voluntary conformance or divergence to tailor local programmes.²⁰² The WCI has made a lasting impact on carbon market design, promoting transparency, environmental rigour, and standardized emissions reporting and trading.²⁰³

C40 has embraced a community of legal practice where members collaborate to reduce emissions and improve climate resilience, driven by a shared understanding of the club’s mandates and rationale. An annual performance evaluation functions as the primary mechanism to track member adherence, combining voluntary commitments with assertive governance to ensure members make progress and fulfil their commitments.²⁰⁴ C40 relies heavily on ‘persuasion, mutual benefit, and reciprocity’ to promote the adoption and practice of club norms among its members.²⁰⁵

The C40 membership standards align with many legality requirements. These standards apply to all members, meeting the *generality* requirement. Although timelines for achieving emissions reduction targets differ, this differentiation is consistently based on the distinctions C40 makes between its wealthier, high-emitting cities and those with low GDP and emissions. The *promulgation* requirement is met not only by publishing membership standards²⁰⁶ but also by issuing detailed instruments to elaborate on key aspects of these standards for implementation. C40 mandates that members develop climate action plans in line with Deadline 2020, a scientific framework designed to guide cities towards achieving the Paris Agreement goals. This framework outlines the necessary pace, scale, and priorities of action.²⁰⁷ C40 thus upholds *clarity* in implementing these standards, which is also evidenced by its procedural practices, including formulating accounting and reporting protocols for member cities.

¹⁹⁸ Ibid., pp. 69–70.

¹⁹⁹ WCI Program Design, n. 65 above, pp. 4, DD-44–6; Chen, n. 69 above, pp. 320–1; Carmody, n. 94 above, p. 102; WCI Interviewee 1, n. 69 above; WCI Interviewee 2, n. 68 above.

²⁰⁰ WCI Interviewee 2, n. 68 above.

²⁰¹ Chen, n. 69 above, p. 332.

²⁰² WCI Interviewee 1, n. 69 above.

²⁰³ WCI Interviewee 2, n. 68 above.

²⁰⁴ See, e.g., Aust, n. 52 above, p. 263; Lin, n. 15 above, pp. 105, 110.

²⁰⁵ Lin, n. 15 above, p. 110.

²⁰⁶ C40 Participation – Letter, n. 78 above; C40 Leadership Standards, n. 56 above.

²⁰⁷ C40 Annual Filing, n. 74 above, pp. 48–9; C40 & Arup, n. 56 above.

Are the practices of C40 cities *congruent* with its membership standards? At least procedurally, Deadline 2020 has steered cities towards specific standards of planning, transparency, and evaluation.²⁰⁸ Using this framework, Los Angeles crafted its Green New Deal in 2019, one of the first city-level climate action plans aligned with the Paris goals.²⁰⁹ Similarly, Toronto aims to help to limit global temperature rise to 1.5°C. C40 offers tools, expertise, and advisory support to assess if Toronto's plan meets this pathway and identify any deviations.²¹⁰ Achieving C40's substantive emissions reduction targets remains a work in progress, which requires concrete evidence to determine if cities are on track. Compliance with Deadline 2020 is evaluated through collaboration between C40 and its members, which report their emissions and climate actions via the CDP-ICLEI platform.²¹¹ While C40 uses this data to assess their compliance with the Leadership Standards,²¹² it has no direct control over how the data is reported. In 2022, C40 reported that its cities were falling short of their goal to halve collective emissions by 2030, being about 9% off-target to stay on course for 1.5°C.²¹³ The lack of evidence to back this claim and insufficient third-party verification in the evaluation process raise credibility concerns. Moreover, even if some members have not achieved their targets, this should not necessarily be interpreted as a deviation from overall congruent practices. Instead, procedural legality should be considered, including whether members uphold their procedural commitments, make reasonable efforts to meet targets, and accept C40's evaluation results and consequences of non-compliance.²¹⁴ These aspects matter in determining adherence to club norms.

It is important to note the requirement of *not asking the impossible*. In pursuing the Deadline 2020 commitment, Phoenix faced the challenge of reducing its emissions by 67% from its baseline by 2030 – a goal that C40's research suggests is necessary for high-emitting cities to support the global goal equitably. Based on C40's pathways model and its own analysis, Phoenix concluded that achieving a 67% reduction was not feasible even under ideal conditions.²¹⁵ As part of the hottest and driest region in the US,²¹⁶ Phoenix expects more drought months under the low GHG emissions scenario,²¹⁷ complicating aggressive emissions reduction plans. Consequently,

²⁰⁸ C40 Interviewee 1, n. 156 above; C40 Interviewee 2, n. 70 above.

²⁰⁹ City of Los Angeles, 'Los Angeles' Green New Deal', Apr. 2019, available at: <https://www.c40knowledgehub.org/s/article/Los-Angeles-Green-New-Deal>; Ciardullo, n. 107 above.

²¹⁰ C40 Interviewee 4, n. 78 above.

²¹¹ For more details see CDP, '2023 Cities Reporting Guidance', available at: <https://guidance.cdp.net/en/guidance?cid=39&ctype=theme&idtype=ThemeID&incchild=1µsite=0&ctype=Guidance>.

²¹² C40 Interviewee 4, n. 78 above; C40 Interviewee 9, n. 72 above.

²¹³ M. Watts, 'C40 Cities Are Making Faster Progress on the Climate Crisis than Most Others, But It's Not Enough', 4 Nov. 2022, available at: <https://www.c40.org/news/c40-cities-are-making-faster-progress-on-the-climate-crisis-than-most-others-but-its-not-enough>.

²¹⁴ See further Brunnée & Toope, n. 13 above, p. 189.

²¹⁵ C40 Interviewee 8, n. 71 above. See further City of Phoenix, 'Climate Action Plan', 27 Sept. 2021, p. 19, available at: <https://www.phoenix.gov/oepsite/Documents/2021ClimateActionPlanEnglish.pdf>.

²¹⁶ City of Phoenix, *ibid.*, pp. 16, 155.

²¹⁷ *Ibid.*, p. 16.

Phoenix worked with C40 to set a more achievable target of a minimum 50% reduction while striving for a 67% cutback through engaging businesses and residents, improving technology and the market, and seeking state and federal support.²¹⁸

Upholding legality ‘involves striking an appropriate balance’, a practice also pertinent to the requirement of *constancy* or *predictability*. While the club commitment was predictable at its inception, its full ramifications may not have been entirely anticipated.²¹⁹ To increase predictability, C40 fosters a collaborative community encouraging self-directed initiatives rather than imposing rigid rules. For example, C40’s accelerators target priority issues to help participating cities in meeting the Leadership Standards by setting science-backed goals; developing short, medium, and long-term plans; and reporting progress annually.²²⁰ C40 adjusts its oversight to the diverse needs and situations of individual cities. As one interviewee highlighted, C40 works with cities to understand their unique aspirations, providing support rather than prescribing actions.²²¹ Others echoed this view, noting that cities have considerable discretion in maintaining their membership. C40 does not dictate their climate policies; instead, cities pursue their domestic targets in line with C40’s expectations.²²²

By integrating Deadline 2020 into their climate action plans and annual evaluations, C40 cities generate a shared understanding of the club’s principles, shaping member interest and identity and the further evolution of the framework. These procedural aspects guarantee that C40’s membership standards are practised and become interactional law, supporting continued efforts to achieve substantive commitments.

6. Conclusion

The case studies of the WCI and C40 demonstrate how subnational climate clubs are contributing to transnational climate governance and lawmaking. These clubs promote member cooperation by refining incentive structures, harmonizing interests, and cultivating norms and communities that influence member perspectives, capabilities, and practices for improved climate action. Their structural stability is achieved through selective membership, which creates entry costs – whether by requiring fees or adherence to standards – to deter free riding and shirking. Member commitment and action are further reinforced by linking membership to shared club understandings, norms, and identities.

Member behaviour both shapes and is shaped by the functions of these clubs to produce public benefits. While the WCI has less influence on the substance of climate policymaking, its mechanisms for ensuring that members follow through on carbon

²¹⁸ C40 Interviewee 8, n. 71 above. See further City of Phoenix, n. 215 above, p. 19.

²¹⁹ See further Brunnée & Toope, n. 13 above, pp. 182–3.

²²⁰ C40 Interviewee 4, n. 78 above. For an example see C40, ‘Urban Nature Accelerator’, available at: <https://www.c40.org/accelerators/urban-nature>.

²²¹ C40 Interviewee 10, n. 70 above.

²²² C40 Interviewee 4, n. 78 above; C40 Interviewee 5, n. 78 above.

pricing commitments are more effective in the short term. C40 has developed norms that influence climate policymaking among its members, including standards for city-wide GHG inventories, reporting, and tangible actions for emissions reductions. However, its ability to shape immediate implementation might be more limited because it relies on capacity and community building rather than sanctions. Whether C40 has directly led members to cut emissions, such as putting them on track to halve emissions by 2030, remains uncertain and requires further research. Beyond their emissions reduction potential, climate clubs offer other benefits for transnational climate governance. In response to political changes, the WCI has improved its contracting practices to increase certainty and reduce interest asymmetries in financing and programme management. It has also established norms for carbon market performance that address collaboration and coordination challenges, particularly during periods of federal inaction. Meanwhile, C40 helps cities to navigate political barriers by building a community of practice that elevates the credibility and legitimacy of local climate initiatives. Through this collaboration, members create and practise norms that shape both club structures and their own interests and identities.

The ambition and influence of these clubs depend on their ability to keep generating incentives and shared understandings, norms, and identities. Both the WCI and C40 offer club benefits to incentivize climate action. This rationalist approach modifies incentive structures to shift climate action benefits from purely public to a mixed model. For example, the WCI's efficient programme management creates economic gains for cooperating members, while C40 restricts non-compliant members from accessing club resources. Although club benefits can initially attract members, sustaining cooperation can be better achieved by bridging rationalist and constructivist approaches. Facilitating member interactions can cultivate shared understandings and peer-supportive communities, reinforcing the implementation of club norms to ensure the continued generation of benefits. The precise benefits of adopting these norms – whether reputational or as first movers – can fluctuate based on members' climate profiles and their level of participation and socialization within the clubs.

Club membership and functions are underpinned by the development, diffusion, and implementation of influential legal norms. The rationalist approach to legalization clarifies the benefits and costs of adopting specific club norms. The WCI and C40 employ hard law for funding and operations to stabilize the structure of member services and legal protection. They also craft a spectrum of softer norms for member management and programme roll-out, striving to respect each jurisdiction's sovereignty and climate goals while remaining resilient to legal challenges. Constructivist approaches enrich the development of club norms by emphasizing member interactions, club structures, procedural aspects of law, and interconnected norms that collectively sustain climate governance.

Both clubs incorporate rationalist and constructivist approaches in their lawmaking, though they emphasize these approaches differently. The WCI balances consensus building, hard-law commitments, and flexibility. This flexibility is rooted in an economic logic that sets a price on carbon and lets the market find the most efficient

ways to reduce emissions, reinforced by meticulous contracting practices. C40's self-regulation aligns the club's overarching goals with implementation flexibility, demonstrating the constructivist notion that translating policy commitments or legal norms should account for varying economic, political, social, and cultural conditions across cities. C40's underlying compliance pull is anchored in its ability to generate shared understandings and foster membership standards as interactional law that binds its members into a community of legal practice. By leveraging the authority of subnational governments for transnational lawmaking, these clubs enable their norms and practices to contribute to the established or evolving parameters of domestic and international law, as with the regulatory function of the WCI to ensure rigour in carbon trading or the C40 framework for steering cities towards the Paris Agreement's 1.5°C target.

This article provides conceptual elements and empirical evidence to support further studies of climate clubs and their actual and potential contributions to transnational climate governance and lawmaking. Although this study focuses on subnational governments, its findings may be applicable to the broader universe of climate clubs, including those led by national governments or corporations, and deserve additional research. Key questions for future investigation include whether constructivist approaches are present in all types of climate club and the extent to which such clubs are directly and indirectly contributing to GHG emissions reductions. The insights into club governance presented here also reveal opportunities for improving international cooperation in fields beyond climate, including but not limited to public health and outer space. This article can guide future research into the value of club-based law and governance in resolving complex policy challenges.

Acknowledgements: I wish to thank Sébastien Jodoin, Pierre-Emmanuel Moyse, Richard Janda, Jaye Ellis, and Mark Purdon for their valuable comments during my doctoral research on climate clubs and the law at McGill University. I am also grateful to William Alford, Alice Izumo, Emma Johnson, and other colleagues at Harvard's East Asian Legal Studies, as well as to Cary Coglianese, Andy Coopersmith, Lauren Owens, Beth Simmons, Jean Galbraith, and William Burke-White at the University of Pennsylvania, for their insights and support. I extend my gratitude to the interviewees for their time and insights and to participants who responded to earlier drafts presented at various conferences. I am very grateful to the anonymous reviewers of *TEL* for their comments and support during the review and revision process. Finally, my deepest gratitude goes to Guangyu Bao and my parents for their support and encouragement throughout this project. All views and errors are my own.

Funding statement: This project was funded by McGill University, Social Sciences and Humanities Research Council of Canada, and Canadian Foundation for Governance Research.

Competing interests: The author declares none.

Cite this article: L. Chen, 'Subnational Climate Clubs: An Interactional Approach to Transnational Lawmaking' (2025) 14(2) *Transnational Environmental Law*, pp. 312–341. doi:[10.1017/S2047102525000019](https://doi.org/10.1017/S2047102525000019)