FORSAKING PROCESS FOR PROGRESS? TRANSNATIONAL ENVIRONMENTAL LAW AND CLIMATE CHANGE

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State actors have long been attempting to address complex environmental issues through multilateral action. However, progress has been slow and stilted. As a result, many doubt the ability of traditional international law to effectively mitigate climate change. This article notes the emergence of transnational environmental law (TEL) and those who herald it as a progress-maker in the climate change space. This article identifies a fundamental theme in transnational environmental legal scholarship: TEL achieves progress at the expense of process. This article then proffers the question: can we forsake process for progress? This article evaluates two pre-eminent examples of TEL—the Science Based Targets initiative and C40—and evaluates both their processes and achieved progress. Following analysis of these case studies, this article concludes there is a minimum floor of process necessary to achieve measurable progress. Process can only be forsaken whilst achieved progress remains legible—but beyond this point, progress is compromised.

I INTRODUCTION

> ... the traditional response of international law, developing international legal standards in small incremental steps, each of which must subsequently be ratified by all countries, is no longer appropriate to deal with the highly complex environmental problems of the future.[1]

* LLB(Hons), University of Otago. This article is a modified version of a dissertation submitted in October 2022 as partial fulfilment of the requirements of an LLB(Hons) degree, and as such the article reflects the sources as they were at that time. The author thanks Professor Nicola Wheen for her support during the writing of that dissertation.

1 Geoffrey Palmer, Prime Minister of New Zealand "General Debate Statement of New Zealand Government" (United Nations General Assembly, United Nations Headquarters, New York City, 2 October 1989) as recorded in *Provisional Verbatim Record of the Fifteenth Meeting* UN Doc A/44/PV.15 (6 October 1989) 61 at 76.

The deadline for doomsday has been set. In the absence of dramatic climate action, the Earth is currently projected to reach 2.7°C of warming above pre-industrial levels.[2] This degree of warming, if unchecked, will massively and catastrophically impact ecosystems, people and infrastructure.[3] Yet, in the face of mounting scientific evidence, nihilism dominates climate change action discourse.

Global environmental problems are "wicked problems",[4] with climate change being the most wicked of all. Criticisms of international environmental agreements are ubiquitous. Increasing urgency in the need for progress calls for alternative approaches to law-making and governance, which can combat the institutional restrictions of the consent requirement,[5] and move forward without unanimous or majoritarian agreement.[6] Amongst the disappointing reality of climate action are several glimmers of hope. One such glimmer is transnational environmental law (TEL). In recent decades, novel transnational governance networks have emerged, establishing TEL, which has stimulated climate action. Emerging discourse surrounding transnationalism heralds it as the potential solution for the collective action issues surrounding state-led climate action.[7]

Theoretically, TEL allows us to make much-needed progress in climate action. TEL allows the bypassing of recalcitrant states and politics by coordinating and uniting actors who want to autonomously pursue efficient progress. However, bypassing of process for the sake of progress is double-edged. Process is not meaningless bureaucracy, but ensures that transnational governance schemes are transparent, accountable and engage in proper consultation. Consequently, this article asks the question: can we forsake process for progress?

There has been limited normative legal study on TEL in practice. This article assesses the relationship between progress and process through comprehensive case studies of two pre-eminent examples of TEL: the Science Based Targets initiative (SBTi); and C40. Ultimately, this article concludes that insufficient process makes the performance of TEL illegible. There is a trade-off between achieving measurable progress and forsaking process.

This article is structured as follows. Part II establishes the pressing need to limit dangerous anthropogenic climate change, before describing the current multilateral efforts to reduce greenhouse

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2 Climate Action Tracker "Temperatures" <climateactiontracker.org>.

3 Intergovernmental Panel on Climate Change *Summary for Policymakers: Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge, 2022) at 9.

4 See Richard J Lazarus "Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future" (2008) 94 Cornell L Rev 1153.

5 Bruno Simma "From Bilateralism to Community Interest" (1994) 250 RCADI 221 at 325.

6 Jutta Brunnée "COPing with Consent: Law-Making Under Multilateral Environmental Agreements" (2002) 15 LJIL 1 at 5.

7 Olaf Dilling and Till Markus "The Transnationalisation of Environmental Law" (2018) 30 JEL 179 at 179.

gas emissions under the United Nations Framework Convention on Climate Change (UNFCCC). Part III premises that TEL is filling the governance gap created by multilateralism's inefficacy. Part III establishes the conceptualisation of TEL adopted by this article and introduces the two examples of TEL, SBTi and C40, examined in Parts V and VI. Part IV discusses the theoretical bases for TEL's promise of progress and the resulting process costs. Many herald TEL as a saviour from multilateral gridlock: a progress-maker.[8] However, the promise of TEL is double-edged and its virtues can also be vices. This Part then distils the theory on TEL to one core tenet: TEL forsakes process for progress. Part IV then sets out the key focus of this article: questioning whether we *can* forsake process for progress. In doing so, it establishes the framework used to analyse the relationship between progress and process in Parts V and VI. In this article, process inquiries focus on participation, transparency and accountability, while progress inquiries consider membership compliance, measurable behavioural changes and ecological ambition. Part V analyses the relationship between progress and process for the SBTi: a pre-eminent example of TEL formulated by private actors. Similarly, Part VI analyses C40, a pre-eminent example of TEL formulated by subnational public actors. Analysis of the SBTi and C40 finds that process failings obscure measurable progress. This article finds a trade-off between forsaking process and achieving measurable progress. Measurable progress is compromised by poor process, which implicates the efficacy TEL.

II THE NEED FOR PROGRESS

This article evaluates TEL against the backdrop of multilateralism's inadequacies. This Part describes the UNFCCC's failure to drive necessary greenhouse gas emission reductions and concludes that multilateralism alone is insufficient: there is a need for alternative or additional sources of climate change progress.

A The Wicked Problem

Climate change is a tragedy of the commons calling for a dramatic, collective response. Anthropogenic climate change has been identified as the largest source of global temperature increases since the mid-20th century.[9] This can be largely attributed to increased greenhouse gas emissions driving the greenhouse effect. This is where an increase in greenhouse gases in Earth's atmosphere slows heat loss to space, warming the planet.[10] Projected consequences of future warming include humanitarian and ecological crises fuelled by an increase in extreme weather events, global

8 Gregory Shaffer and Daniel Bodansky "Transnationalism, Unilateralism and International Law" (2012) 1 TEL 31 at 39.

9 Intergovernmental Panel on Climate Change "Summary for Policymakers: Global Warming of 1.5°C (IPCC, Incheon, 2018) at 53.

10 NASA "The Causes of Climate Change" Global Climate Change <climate.nasa.gov/causes>.

temperatures, precipitation, sea level rise, ocean acidification, and a decrease in habitable and arable land.[11]

Experts are calling for temperature rise to be limited to 1.5°C to reduce risks of irreversible adverse consequences.[12] However, current global policies are projected to result in 2.7°C of warming above pre-industrial levels.[13] Historically, international agreement on a collective response to climate change has been difficult to reach. Climate change has been politicised, and action has been slow and stilted. If future generations are to have any hope, effective progress must be made towards mitigating climate change. The multilateral climate regime has struggled to make any progress at all, let alone progress that is effective. Even 28 years after the UNFCCC's entry into force, the world is still on track for climate catastrophe.

B Multilateralism

Multilateral environmental agreements are the core of modern international environmental law.[14] They have been deemed the "workhorses" of collective interest.[15] Multilateralism can be nominally defined as the deliberate coordination of national policy in three or more states.[16] Talk of multilateralism dominates the international space: "despite all of our disappointments with its functioning, we still worship at the shrine of global institutions like the UN".[17] Multilateralism has a number of potential legal forms, including legally binding treaties, conventions, protocols and non-binding political agreements.[18] States must consent in order to be legally bound by any treaty.[19] This consent can be expressed through ratification or "any other means if so agreed".[20] In practice, parties consent to the modification of treaty obligations through means ranging from formal ratification to majority decision-making at a Conference of the Parties (COP).[21]

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11 Intergovernmental Panel on Climate Change *Summary for Policymakers* (2022), above n 3, at 8–19.

12 Intergovernmental Panel on Climate Change *Summary for Policymakers* (2018), above n 9, at 53.

13 Climate Action Tracker, above n 2.

14 Brunnée, above n 6, at 2.

15 Simma, above n 5, at 322.

16 John Gerard Ruggie "Multilateralism: the anatomy of an institution" (1992) 46 IO 561 at 565.

17 José E Alvarez "Multilateralism and Its Discontents" (2000) 11 EJIL 393 at 394.

18 Lavanya Rajamani "The Durban Platform for Enhanced Action and the Future of the Climate Regime" (2012) 61 ICLQ 501 at 503.

19 Vienna Convention on the Law of Treaties 1155 UNTS 331 (opened for signature 23 May 1969, entered into force 27 January 1980), art 11.

20 Article 11. See also arts 9–18 and 24.

21 Brunnée, above n 6, at 21.

C United Nations Framework Convention on Climate Change

The principal multilateral instrument addressing climate change is the UNFCCC. The UNFCCC entered into force in 1994,[22] after three years of negotiations.[23] The Convention has been almost globally ratified, and ultimately seeks the "stabilization of greenhouse gas concentration[s] in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".[24] The UNFCCC's fundamental principles are that responsibilities are common but differentiated, and that developed country parties should take the lead in combatting climate change.[25]

The UNFCCC was intended to be a starting point for climate action: an agreement to agree. This model had been successfully adopted by the Vienna Convention for the Protection of the Ozone Layer (the Ozone Convention).[26] The UNFCCC anticipates that parties will adopt legally binding protocols under the UNFCCC,[27] which are essentially additional agreements that must be signed and ratified.[28] Alternatively, parties may amend the UNFCCC at COP meetings, normally by consensus, but at least by a three-quarter majority of those presents.[29] However, only consenting states who ratify these amendments will be bound.[30] States "cannot be compelled" to accept new treaty terms to which they have not consented.[31]

Over the past 28 years, there have been a significant number of developments under the UNFCCC, with respect to reaching and implementing international environmental agreements. However, negotiations have been plagued by disagreements, and have largely resulted in ineffective decisions. The most recent significant agreement under the UNFCCC is the adoption of the Paris Agreement in December 2015.[32] The Agreement calls for parties to make efforts to keep global temperature increase

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22 United Nations Framework Convention on Climate Change 1771 UNTS 107 (opened for signature 4 June 1992, entered into force 21 March 1994) [UNFCCC].

23 Charlotte Streck "Innovativeness and Paralysis in International Climate Policy" (2012) 1 TEL 137 at 139.

24 UNFCCC, art 2.

25 Article 3.

26 Vienna Convention for the Protection of the Ozone Layer 1513 UNTC 293 (open for signature 22 September 1985, entered into force 22 September 1988).

27 UNFCCC, art 17.

28 Patrick Széll "Decision Making under Multilateral Environmental Agreements" (1996) 26 Envtl Poly & L 210 at 211.

29 UNFCCC, art 15(3).

30 Article 15(4).

31 Brunnée, above n 6, at 18.

32 Paris Agreement 3156 UNTS 79 (open for signature 22 April 2016, entered into force 4 November 2016).

well below 2°C, limiting it to 1.5°C above pre-industrial levels.[33] At 11 pages, the Agreement is "lean",[34] but covers mitigation, adaptation and implementation (technology transfer, financing and capacity building).[35]

The chosen commitment architecture for the Paris Agreement was nationally determined contributions (NDCs) submitted by the parties. Parties must submit an NDC every five years, with increasing ambition.[36] In Paris negotiations, the legal character of NDCs was a contentious issue, which was addressed through precise drafting.[37] Parties are only required to "implement" NDCs, not "achieve" them.[38] Importantly, the Paris Agreement does not obligate parties to implement domestic measures to meet their NDCs; merely to "pursue" them.[39] Many provisions of the Agreement are facilitative rather than prescriptive.[40]

The "bottom-up" facilitative approach of the Paris Agreement leaves a wide discretionary margin for parties to determine the level of their commitment to combatting climate change.[41] At the time of adoption, NDCs were too unambitious to meet the 2°C goal,[42] leading to questions surrounding whether "wide participation [came] at the price of stringency and efficacy".[43]

The UNFCCC has a global membership and emphasises transparent negotiation,[44] but this inclusiveness, in combination with a need for consensus, has led to incredibly slow progress on substantive decisions and agreements tackling climate change. More recently, at COP-26 in Glasgow, the Glasgow Climate Pact was adopted at the last minute to "speed up" the climate response,[45] but

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33 Article 2(1)(a).

34 Annalisa Savaresi "The Paris Agreement: a new beginning?" (2016) 34 JERL 16 at 19.

35 Paris Agreement, art 3.

36 Article 4(1)–(3).

37 Daniel Bodansky "The Legal Character of the Paris Agreement" (2016) 25 RECIEL 142 at 146.

38 At 146.

39 Paris Agreement, art 4(2).

40 Bodansky, above n 37, at 146.

41 Savaresi, above n 34, at 21.

42 *Synthesis Report on the Aggregate Effect of the Intended Nationally Determined Contributions* UN Doc FCCC CP/2015/7 (30 October 2015).

43 Cara A Horowitz "Introductory Note to Paris Agreement" (2016) 55 ILM 740 at 741.

44 Jutta Brunnée and Stephen J Toope *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge University Press, Cambridge, 2010) at 184.

45 *Report of the Conference of the Parties on its twenty-sixth session, held in Glasgow from 31 October to 13 November 2021. Part one: Proceedings* UN Doc FCCC/CP/2021/12 (8 March 2022).

made no *real* progress. This deal was driven by "compromise" and "balance",[46] and was deemed the "least worst" outcome by a top New Zealand negotiator.[47]

Despite all efforts, the core climate regime has remained mostly static.[48] Neither the facilitative approach of the Paris Agreement, nor the contractual approach to legal commitments under the UNFCCC, has proven adequate.[49] Daniel Bodansky argues that there are three dimensions to an international agreement: stringency, participation and compliance.[50] Weakness along any of these dimensions compromises the efficacy of the agreement.[51] It is this balancing act that has blighted negotiations under the UNFCCC. Even if states deliver on their Paris NDCs, warming will still reach 2.4°C above pre-industrial levels.[52] Change promoted by formal treaty negotiations will be too little, too late to prevent anthropogenic climate change.

III DEFINING THE TRANSNATIONAL

As discussed by Part II, orthodox international environmental law is failing to make the progress necessary to prevent anthropogenic climate change. The world is calling out for climate change progress by any means possible. Arguably, TEL has answered that call. This Part defines TEL before introducing the SBTi and C40: the two case studies of TEL that will be closely investigated in Parts IV and V.

A The Promise of Transnationalism

The policy gap left by multilateralism has left space for non-state actors to carve themselves meaningful roles in the climate action space.[53] The role of non-state actors has transformed from rule-taking to rule-making.[54] The inadequacies of intergovernmental multilateralism have left space which has been eagerly filled by transnational partnerships, networks and initiatives designed to address

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46 Richard Mahapatra "CoP26: With less than 100 months left for a climate redline, here is a deal that feels laggard" (14 November 2021) DownToEarth <www.downtoearth.org.in>.

47 Laura Quiñones "COP26 closes with 'compromise' deal on climate, but it's not enough, says UN chief" (13 November 2021) UN News <news.un.org>.

48 Streck (2012), above n 23, at 142.

49 Daniel Bodansky *The Durban Platform: Issues and Options for a 2015 Agreement* (Center for Climate and Energy Solutions, December 2012) at 1.

50 At 3.

51 At 3.

52 Climate Action Tracker, above n 2.

53 Jolene Lin Shuwen "Governing Climate Change: Global Cities and Transnational Lawmaking" (PhD in Law, Erasmus University Rotterdam, 2017) at 146.

54 See José C S Andrade and José A Puppim de Oliveira "The role of the private sector in global climate and energy governance" (2015) 130(2) J Bus Ethics 375.

climate issues.[55] This "soft law" has emerged to overcome political blockages and regulatory dead-ends.[56] Institutional innovation and novel governance structures have bloomed as public and private agencies have cooperated and coordinated.[57] In the climate change area, there has been a "surge" of transnational partnerships and initiatives with aims ranging from standard setting to information collection, capacity building and implementation.[58] Transnational law interacts with multilateral treaties, so must be included in legal analysis of the international arena.[59]

B The Meaning of "Transnational Law"

Transnational legal scholarship is no longer "in its infancy",[60] but the area is still "young and dynamic".[61] Immaturity of method and concept have produced widely differing accounts of transnational law,[62] which has unsettled analysis.[63] The label is often used "without adequate conceptual work on what the term covers".[64]

This article considers there are two elements of transnational law which must be examined in turn: (1) the *transnational* element; and (2) the *legal* element.

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55 Charlotte Streck "Strengthening the Paris Agreement by Holding Non-State Actors Accountable: Establishing Normative Links between Transnational Partnerships and Treaty Implementation" (2021) 10 TEL 493 at 494.

56 Peer Zumbansen "Transnational Law" in Jan M Smits (ed) *Elgar Encyclopedia of Comparative Law* (Edward Elgar Publishing, Cheltenham (UK), 2006) 738 at 743.

57 Streck, above n 55, at 494.

58 At 495.

59 Peter H Sand and Jeffrey McGee "Lessons learnt from two decades of international environmental agreements: law" (2022) 22 Int Environ Agreements 263 at 264.

60 Emily Webster and Laura Mai "Transnational environmental law in the Anthropocene" (2020) 11 TLT 1 at 6. See also Elizabeth Fisher "The Rise of Transnational Environmental Law and the Expertise of Environmental Lawyers" (2012) 1 TEL 43 at 45–48.

61 Veerle Heyvaert and Leslie-Anne Duvic-Paoli "Preface" in Veerle Heyvaert and Leslie-Anne Duvic-Paoli (eds) *Research Handbook on Transnational Environmental Law* (Edward Elgar Publishing, Cheltenham, 2020) xiv at xiv.

62 Thijs Etty and others "Editorial: Ten Years On: Rethinking Transnational Environmental Law" (2021) 10 TEL 391 at 391.

63 Kati Kulovesi, Michael Mehling and Elisa Morgera "Global Environmental Law: Context and Theory, Challenge and Promise" (2019) 8 TEL 405 at 405.

64 Gregory Shaffer "Transnational Legal Ordering and State Change" in Gregory Shaffer (ed) *Transnational Legal Ordering and State* Change (Cambridge University Press, Cambridge, 2012) 1 at 4.

1 The "transnational" element of transnational law

There are three discernible groups of thought on what qualifies a law as being "transnational": (1) any transboundary law or regulation;[65] (2) private cross-border regulatory processes;[66] or (3) private and semi-private cross-border regulatory processes.[67]

This article defines "transnational" laws as any cross-boundary law that is not formally enacted by or between states,[68] but is driven by private actors and/or sub-national governments. This conception of "transnational" excludes laws deriving from national or international sources.[69] However, transnational legal governance interacting with formal state action will still be considered in this article.

2 The "legal" element of transnational law

It is important to clarify exactly what processes constitute transnational law. It is commonly argued that transnational climate actions constitute a tangible sphere of governance.[70] But, as has been asked so many times before, what qualifies as law?

In the classification of transnational law, issues often arise where organisational norms regulating conduct have non-binding persuasive force rather than binding authority.[71] Some commentators argue that transnational law must be "complemented, endorsed, or limited" by formal legal structures to legitimately be law.[72] Voluntary codes of conduct are very, *very* soft law, and challenge traditional conceptions of the law.[73]

This article does not seek to answer whether transnational law is or ought to be considered law. Transnational law may erode legal formalism and disturb legions of legal positivists, but drawing lines around the proper and improper ignores the sophisticated reality of transnational regulation.

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65 Philip Jessup *Transnational Law* (Storrs Lectures on Jurisprudence, Yale Law School, New Haven, 1956); Harold Hongju Koh "Why Transnational Law Matters" (2006) 24 Penn State ILR 745; Shaffer and Bodansky, above n 8; Zumbansen, above n 56; and Etty and others, above n 62, all adopt definitions in varying breadths.

66 Streck (2012), above n 23, and Streck (2021), above n 55, focus on private non-state actors.

67 Dilling and Markus, above n 7, at 182.

68 Carrie Menkel-Meadow "Why and How to Study 'Transnational Law'" (2011) 1 UC Irvine L Rev 97 at 102.

69 Dilling and Markus, above n 7, at 182.

70 Sander Chan, Clara Brandi and Steffen Bauer "Aligning Transnational Climate Action with International Climate Governance: The Road from Paris" (2016) 25 RECIEL 238 at 238.

71 Veerle Heyvaert "The Transnationalization of Law: Rethinking Law through Transnational Environmental Regulation" (2017) 6 TEL 205 at 223.

72 Dilling and Markus, above n 7, at 183.

73 Zumbansen, above n 56, at 742.

Globalisation, privatisation and liberalised trade have spawned many normative communities participating and stimulating international climate governance.[74]

A rigid definition of law is "not a useful strategy",[75] and would compromise analysis. The erosion of traditional institutions and pillars of international law has created the space for transnational law, so requiring formal institutions seems counter-productive. This is post-Westphalian reality: states no longer dominate international affairs.[76]

This article will liberally qualify "law". For the purposes of this article, any form of agreement or self-regulation will be sufficient if it affects, or has the power to affect, behaviour or processes beyond a single state border.[77] Transnational law is not crystallised in formal processes, but is ongoing and interactional.[78] This understanding of law derives from a sociolegal conception of legitimacy: where norms that shape conduct and behaviour meet internal legitimacy criteria.[79] If transnational law is to be *legal*, it must have an "element of establishment".[80] This article takes the stance that where non-state actors construct and implement norms and voluntary standards, they are constructing and implementing law.[81] This must be distinguished from the mere influence or activity of transnational *actors.*

In sum, this article defines transnational law as any norm or regulation constructed and implemented across borders by private actors, subnational actors or both. It must be noted that the definition adopted is not the *only* conception of transnational law, merely the most suitable one for the purposes of this article.

C Transnational Environmental Law in Practice

Two pre-eminent examples of TEL are the SBTi and C40, which will be examined in detail in Parts V and VI, respectively. The SBTi was chosen as it is purely private, has a large number of actors and its Net-Zero Standard was the first of its kind established for corporations. The initiative has

74 Lin, above n 53, at 6.

75 Paul Schiff Berman "A Pluralist Approach to International Law" (2007) 32 Yale J Int'l L 301 at 302.

76 Lin, above n 53, at 7.

77 Menkel-Meadow, above n 68, at 102; and Shaffer and Bodansky, above n 8, at 32.

78 Brunnée, above n 6, at 6.

79 See generally Brunnée and Toope, above n 44.

80 Neil Walker *Intimations of Global Law* (Cambridge University Press, Cambridge, 2015) at 171.

81 Jolene Lin "The role of subnational actors in transnational climate change law" in Veerle Heyvaert and Leslie-Anne Duvic-Paoli (eds) *Research Handbook on Transnational Environmental Law* (Edward Elgar Publishing, Cheltenham (UK), 2020) 216 at 220.

received "little attention" in academic literature,[82] and the effectiveness of the SBTi has been identified as a "critical research gap".[83] For similar reasons, C40 was chosen as an example of a pre-eminent subnational transnational network. C40 is an "archetypical global city-network",[84] which is "widely recognised as the leading network of global cities addressing climate change".[85] While there is increasing literature on the role of cities in climate change governance, little scholarship has closely assessed the legal effect and relevance of these governance actions.[86]

1 SBTi as transnational environmental law

The SBTi, founded by the CDP (formerly the Carbon Disclosure Project), World Resources Institute, World Wide Fund for Nature and the United Nationals Global Compact, aims to promote "ambitious corporate climate action" through the adoption of science-based emissions reduction targets.[87] In pursuit of this goal, the SBTi established the Corporate Net-Zero Standard: the first global framework for setting corporate targets consistent with reaching net-zero emissions by 2050.[88] The Corporate Net-Zero Standard satisfies the definition of TEL set out by this article.

The Corporate Net-Zero Standard establishes a standardised understanding of "net-zero" emissions, and encourages rapid, deep emissions cuts across a company's entire value chain.[89] For this purpose, SBTi splits emissions into three categories:[90] (1) emissions produced through company processes are scope 1; (2) those produced through electricity and heat are scope 2; and (3) those generated by supplies and end-users are scope 3.

Under the Corporate Net-Zero Standard, companies must also set both short and long-term targets which support the halving of emissions by 2030, and net-zero emissions—thereby achieving SBTi's

82 Jannick Giesekam and others "Science-Based Targets: On Target?" (2021) 13 Sustainability 1657 at 1.

83 At 2.

84 David J Gordon "The Politics of Accountability in Networked Urban Climate Governance" (2016) 16 GEP 82 at 82.

85 Lin, above n 53, at 101.

86 At 5.

87 SBTi "Ambitious Corporate Climate Action" Science Based Targets <sciencebasedtargets.org>.

88 Science Based Targets *SBTi Corporate Net-Zero Standard* (Version 1.1, April 2021) at 14.

89 Above n 88.

90 Above n 88.

Corporate Net-Zero Standard—by 2050.[91] The Corporate Net-Zero Standard Criteria establish the criteria which must be met for net-zero targets to be SBTi-validated.[92]

2 *C40 as transnational environmental law*

C40 is a transnational global network of mayors,[93] who lead their cities in taking "ambitious, collaborative and urgent climate action" aligned with "science-backed targets".[94] C40 is distinct from other transnational schemes due to its limited and selective membership, which is curated by performance-based requirements.[95] However, its voluntary participation, lack of a formal hierarchy, and limited compliance measures are fairly typical.[96]

The C40 network has established several voluntary standards, including the Global Covenant of Mayors and the Cities Race to Zero. These standards are examples of TEL. The Global Covenant of Mayors mandates regular public reporting of greenhouse gas inventories, and the establishment and maintenance of climate action plans.[97] The Cities Race to Zero aligns cities with science-based targets,[98] and was made by C40 in partnership with a number of transnational environmental networks.[99] Signing up to the Cities Race to Zero requires a public endorsement of the initiative's principles, a pledge to reach net-zero emissions before or during the 2040s, the setting of an interim fair-share target for emissions reductions for the decade, planned climate action and annually reported progress.[100]

This article focuses on membership of C40 itself as TEL. This focus is driven by the lack of existing fruitful analysis on the aforementioned standards, but also the distinctive elements of the C40 scheme. Although C40 is the transnational governance network itself, this article contends that membership of the C40 constitutes undertaking transnational legal obligations. C40 is distinctive in

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91 Science Based Targets *Science-Based Net-Zero: Science Based Targets Initiative Annual Progress Report, 2021* (Annual Progress Report, June 2022) [SBTi Annual Progress Report 2021] at 3.

92 Science Based Targets *SBTi Corporate Net-Zero Standard Criteria* (Version 1.0, October 2021).

93 C40 Cities "Home" <www.c40.org>.

94 C40 Cities "Our Cities" <www.c40.org/cities>.

95 Gordon, above n 84, at 84.

96 Kristine Kern and Harriet Bulkeley "Cities, Europeanization and Multi-level Governance: Governing Climate Change through Transnational Municipal Networks" (2009) 47 JCMS 309 at 310.

97 Compact of Mayors "Compact of Mayors: Definition of Compliance" United Cities and Local Governments <uclg.org>.

98 C40 Cities "Cities Race to Zero" <www.c40.org>.

99 Above n 98.

100 Above n 98.

that it has *performance-based* membership requirements.[101] For example, in 2016, commitment to delivering an "inclusive and resilient climate action plan" consistent with the Paris Agreement's 1.5°C ambition became a requirement of membership.[102] Membership is voluntary, and governance is "non-hierarchical and horizontal", but "decisions taken within [C40] are usually directly implemented by member cities".[103]

The C40 Leadership Standards for 2021–2023 came into effect on 1 January 2021, and prescribe the minimum requirements for member cities which must be adhered to on alleged threat of removal.[104] The C40 Leadership Standards set an "ambitious standard" for C40's membership cities.[105] There are five key criteria which cities must meet under these Leadership Standards: (1) adopt a regularly updated climate action plan aligned with the 1.5°C limit on warming contained in the Paris Agreement; (2) stay on track to achieve their climate action plan and contribute to halving the collective emissions of C40 by 2030; (3) use the tools available to them to "address the climate crisis" and mainstream their targets into the "most impactful" decision-making processes for their city; (4) innovate and take action to reduce emissions beyond those which the city is directly able to control; and (5) "demonstrate global climate leadership" in supporting the Paris Agreement.[106]

Both SBTi's Net-Zero Standard and C40's membership requirements will be the principal subjects of the analysis in Parts V and VI.

IV FORSAKING PROCESS FOR PROGRESS

This Part summarises the theory on the progress gains and process costs offered by TEL. Sections A and B find that scholarship tends to converge on the point that progress is gained by forsaking process. Section C then sets out the analytic framework that will be used in Parts V and VI to test the question: can we forsake process for progress?

A The Promise of Progress

Theoretically, progress is achieved by TEL through: (1) bypassing state consent; (2) enabling flexibility; and (3) coordinating and maximising economic efficiency.

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101 C40 Cities "Statement by the C40 Cities Steering Committee on the organisation's new Leadership Standards" (6 January 2021) <www.c40.org>.

102 C40 Cities "About C40" <www.c40.org>.

103 Kern and Bulkeley, above n 96, at 310.

104 C40 Cities "About C40", above n 102.

105 C40 Cities, above n 102.

106 C40 Cities "Statement by the C40 Cities Steering Committee on the organisation's new Leadership Standards", above n 101.

1 *Bypassing state consent*

Progress made by TEL is faster than state-centric progress.[107] Transnational legal schemes and standards are often born from state inaction,[108] whether due to an inability or an unwillingness to act.[109] TEL has both a "destructive and constructive thrust": in constructing alternatives to strict multilateralism, it destroys the importance of, and need for, state consent.[110] This bypassing of recalcitrant states, or states who lack the capability for successful climate interventions,[111] pushes forward the response to climate change. In the face of weak governance or a lack of political will, non-state actors do not need to defer to governments, but can take collective and coordinated action through transnational environmental schemes.[112] This helps bridge the "action gap" in climate action by responding to regulatory blocks and gaps.[113]

2 *Enabling flexibility*

Significant amounts of TEL emerge in regulatory gaps.[114] This is partially because of TEL's greatest virtue: flexibility. It is argued that flexibility increases the legitimacy and compliance-rates of TEL, as it allows for reflexivity, adjustment, experimentation and learning.[115]

There are three facets of flexibility,[116] all of which TEL possesses due to its "diversity and fluidity of form".[117] First, TEL allows a certain discretion in the application of standards, which fosters participation and learning.[118] Second, TEL is adaptively flexible through its alleviation of risk and

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107 Charlotte Streck "Filling in for Governments? The Role of the Private Actors in the International Climate Regime" (2020) 17 JEEPL 5 at 18.

108 See Jessica F Green and Graeme Auld "Unbundling the Regime Complex: The Effects of Private Authority" (2017) 6 TEL 259.

109 Streck (2020), above n 107, at 18.

110 Zumbansen, above n 56, at 744.

111 Kenneth W Abbott "Strengthening the Transnational Regime Complex for Climate Change" (2014) 3 TEL 57 at 60.

112 Streck (2020), above n 107, at 18.

113 At 18.

114 At 23.

115 Robert Falkner "A Minilateral Solution for Global Climate Change? On Bargaining Efficiency, Club Benefits, and International Legitimacy" (2016) 14 Perspectives on Politics 87 at 97.

116 Sébastien Jodoin, Ling Chen and Carolina Gueiros "Vice or virtue? Flexibility in transnational environmental law" in Veerle Heyvaert and Leslie-Anne Duvic-Paoli (eds) *Research Handbook on Transnational Environmental Law* (Edward Elgar Publishing, Cheltenham (UK), 2020) 284 at 285.

117 Walker, above n 80, at 56.

118 Jodoin, Chen and Gueiros, above n 116, at 285.

uncertainty through temporal adjustments.[119] Third, TEL provides for market-based collaboration and innovation, rather than strictly developed and enforced standards.[120] These features pull in more participants, allow for adjustment in the face of uncertainty and make compliance more cost-effective for actors.[121]

3 Coordination and economic maximisation

As engagement with TEL is generally entirely voluntary,[122] institutes and schemes must work hard to obtain buy-in. The flexibility of schemes, and their voluntary and non-binding nature, attracts huge numbers of members.[123] These members are attracted to schemes which are economically efficient *for them*, which is considered to increase compliance with those chosen schemes.[124]

TEL responds to supply and demand, which promotes efficiency.[125] The existence of a number of transnational initiatives with voluntary participation allows non-state actors to "scheme shop".[126] This autonomy allows non-state actors to exploit their competitive advantage to pursue emissions reductions most efficient for them. TEL grants non-state actors autonomy to commit to what they deem most efficient, which motivates action where there previously was none.

TEL stimulates collective action from non-state actors like cities, firms and non-governmental organisations (NGOs) and then *coordinates* this action.[127] TEL facilitates participation in a highly fragmented space through the accommodation of interests.[128] The dissemination of information, standard setting, establishment of targets, creation of methods and consultation facilitated by TEL ensures that climate action taken by non-state actors is focused rather than disparate.

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119 At 285–286.

120 At 286.

121 At 290–291.

122 Dilling and Markus, above n 7, at 179.

123 At 201.

124 Abbott, above n 111, at 67.

125 Walter Mattli and Ngaire Woods *The Politics of Global Regulation* (Princeton University Press, Princeton, 2009) at 43.

126 Streck (2020), above n 107, at 18.

127 Abbott, above n 111, at 71.

128 Zumbansen, above n 56, at 745.

B Sacrificing Process

Theoretically, TEL achieves progress at the expense of process. Process costs result in: (1) legitimacy issues; (2) influence from self-serving interests; (3) lacking transparency and accountability; and (4) few hard, binding rules.

1 Legitimacy

With respect to the process failings of TEL, the elephant in the room is the lack of democratically mandated states. However, a focus on state-based legitimacy distracts from the assessment of TEL's own merits and failings. Regardless of traditional conceptions of legitimacy,[129] TEL is *happening.* Consequently, this discussion of process failings will not focus on state-derived legitimacy.

2 Interests represented

Many transnational climate standards are driven and dominated by specific groupings based in industrialised countries in the Global North.[130] Additionally, this relatively homogenous composition of TEL initiatives opens them up to characteristic weaknesses: business-focused initiatives will be undemanding, while NGO-driven schemes will have limited uptake.[131] Although some dispute that global and transnational law is inclusive and enhances opportunities for a variety of actors to participate in deliberation,[132] some of these actors owe more duties to their shareholders than to the public. Consequently, TEL is prone to co-option by self-serving interests. As TEL gains more autonomy from classical environmental law, the risk of influence from private interests grows.[133]

3 Transparency and accountability

The increasing influence of transnational standards, particularly those driven by private non-state actors, is raising concerns about a lack of transparency and accountability.[134] Transparency may be lacking around how standards are set, who is setting them, and whether members are complying with standards. Transnational standards may not be governed by publicly available due process rules, which results in diminished public protections.[135] A particular concern with potential vested interests

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129 See Dolf Sternberger "Legitimacy" in David Sills (ed) *International Encyclopedia of the Social Sciences* (Macmillan, New York, 1968) vol 9 at 244.

130 Klaus Dingwerth and Jessica F Green "Transnationalism" in Karin Bäckstrand and Eva Lövbrand (eds) *Research Handbook on Climate Governance* (Edward Elgar Publishing, Cheltenham (UK), 2015) 153 at 156.

131 Abbott, above n 111, at 76.

132 Kulovesi, Mehling and Morgera, above n 63, at 424.

133 Dilling and Markus, above n 7, at 205–206.

134 Graeme Auld and Lars H Gudbrandsen "Transparency in Nonstate Certification: Consequences for Accountability and Legitimacy" (2010) 10 Global Environmental Politics 97 at 98.

135 At 114–115.

involved in the crafting of transnational standards is a complete lack of accountability due to poor transparency.[136]

4 Voluntary and flexible

The flexibility of TEL is double-edged: as well as undermining predictability and the binding character of standards, flexibility mechanisms can be used to bolster membership while avoiding strict compliance.[137] Excessive flexibility undermines effectiveness and credibility. "Self-reporting" and "self-monitoring" systems can lack rigour.[138]

Where standards and targets can be flexibly defined, participants face a perverse incentive to undermine effectiveness for achievability.[139] The setting of baselines or targets can have questionable appropriateness or ambition.[140] Targets and baselines which are unambitious not only preclude progress, but also misrepresent the apparent "progress" or "compliance" achieved by the scheme.[141]

The voluntary nature of TEL means that "members" must be enticed to participate through "benefits". These benefits include reputational benefits, consumer access, competitive economic advance and industry leadership.[142] Voluntary initiatives have obvious limitations: bluntly put, members are only motivated to accede to schemes that make them "look good". For this reason, TEL can be used for "greenwashing", where a company changes or presents its behaviour to appear environmentally friendly rather than for environmental improvements.[143] Standards formulated by non-state actors for themselves could be effective self-regulation, but only if "sufficiently stringent and credible".[144] Non-state actors are not fundamentally more willing than states to take on onerous climate change obligations.

C The Relationship between Process and Progress

This article investigates the relationship between process and progress in practice through case studies. This article is non-aspirational: it does not argue *for* or *against* the transnationalisation of

136 At 114–115.

137 Jodoin, Chen and Gueiros, above n 116, at 292–293.

138 Helmut Breitmeier, Oran R Young and Michael Zürn *Analyzing International Environmental Regimes: From Case Study to Database* (The MIT Press, Cambridge (Mass), 2006) at 71.

139 Jodoin, Chen and Gueiros, above n 116, at 292–293.

140 At 291–292.

141 Harro van Asselt and Joyeeta Gupta "Stretching Too Far? Developing Countries and the Role of Flexibility Mechanisms Beyond Kyoto" (2009) 28 Stan Envtl LJ 311 at 377.

142 Abbott, above n 111, at 77.

143 Dilling and Markus, above n 7, at 185.

144 Streck (2020), above n 107, at 22.

climate change action. TEL has already crystallised. A number of actors, institutions and schemes form a transnational "regime complex".[145] Literature converges on the point that TEL is here to stay and must be taken seriously.[146]

The contention surrounds TEL's substantive and procedural "trade-off".[147] The process requirements of traditional international law are made by the international community *to protect* the international community. These requirements are not made to slow progress unduly, but ideally to ensure that progress is the right progress, conducted in the right way, and achievable and measurable. Is any progress worthwhile regardless of the process cost? Alternatively, is there a point at which a lack of process compromises progress?

We are in dire need of progress in the "war" against climate change. The "enabling" character of TEL is its greatest asset.[148] TEL *enables* progress. However, what scientific basis does this progress need to have? How ambitious should this progress be? How should this progress be monitored? There is a fundamental relationship between progress and process. There is a point at which process is *necessary* to create, track and validate progress. "[S]ubject to principled substantive and procedural constraints", the "opportunities" created by TEL may outweigh its "risks".[149]

In Parts V and VI, the relationship between process and progress for both the SBTi and C40 will be assessed to determine whether the process costs outweigh the progress achieved. The concepts "progress" and "process" as they will be used in this analysis will now be defined.

1 Progress

In the context of international law or TEL, there is a vast literature and little consensus on what constitutes progress,[150] good practice,[151] or even effectiveness.[152] There are any number of criteria

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145 Abbott, above n 111, at 60.

146 At 62.

147 Shaffer and Bodansky, above n 8, at 38.

148 Jerneja Penca "Regulatory instruments of transnational environmental governance" in Veerle Heyvaert and Leslie-Anne Duvic-Paoli (eds) *Research Handbook on Transnational Environmental Law* (Edward Elgar Publishing, Cheltenham, 2020) 88 at 102.

149 Shaffer and Bodansky, above n 8, at 39 and 41.

150 Chan, Brandi and Bauer, above n 70, at 244.

151 At 244.

152 Oran R Young, Marc A Levy and Gail Osherenko "The Effectiveness of International Environmental Regimes" in Oran R Young (ed) *The Effectiveness of International Environmental Regimes: Causal Connections and Behavioral Mechanisms* (MIT Press, Cambridge (Mass), 1999) 1 at 3; and Peter H Sand "The Effectiveness of Multilateral Environmental Agreements: Theory and Practice" (2021) Glob Envtl L Ann 211 at 211–213.

that could be adopted: for example, the United Nations Conference on Environment and Development Preparatory Committee set out 32 criteria for evaluating the efficacy of instruments and agreements.[153]

This article will adapt the approach articulated by Peter Sand who simplifies the inquiry into effectiveness into three basic questions.[154] The first question is a test of legal effectiveness: how and to what extent do members meet their obligations? Second is a test of behavioural effectiveness: what are the measurable changes attributable to member participation? Third is a test of ecological effectiveness: how successfully have the environmental problems targeted by the scheme been solved or mitigated?

To assess the progress achieved by the SBTi and C40, this article will ask three questions. First, is there an extensive membership who comply with their obligations? Second, what are the measurable positive changes brought about by member behaviour attributable to participation? Third, are these obligations and measurable changes ambitious enough to be ecologically effective?

2 Process

In the same vein, a comprehensive assessment of process could examine any number of criteria. TEL pursues a socio-legal legitimacy, rather than an orthodoxly legal one.[155] Its legitimacy stems from due process. This article employs a bare-bones analytic toolkit, and examines due process through transparency, accountability and participation. These are the elements of due process emphasised by the UNFCCC,[156] and the Enhanced Transparency Framework under the Paris Agreement.[157]

Analysis of transparency examines the "disclosure of information intended to evaluate and/or steer behavior".[158] Transparency has a close relationship with accountability; it enables scrutiny. Outcome transparency can be distinguished from procedural transparency.[159] Outcome transparency focuses

153 Sand, above n 152, at 211.

154 At 211–213.

155 Dan Bodansky "Legitimacy" in Dan Bodansky, Jutta Brunnée and Ellen Hey (eds) *Oxford Handbook of International Environmental Law* (Oxford University Press, Oxford, 2007) 704 at 709.

156 UNFCCC, Annexes I and II.

157 Paris Agreement, art 13.

158 Aarti Gupta and Michael Mason "Transparency and International Environmental Politics" in Michele Betsill, Kathryn Hochstetler and Dimitris Stevis (eds) *Advances in International Environmental Politics* (Palgrave Macmillan, London, 2014) 356 at 356–357.

159 Graeme Auld and Lars H Gulbrandsen "Transparency in Nonstate Certification: Consequences for Accountability and Legitimacy" (2010) 10(3) GEP 97 at 99–100.

on "openness about regulated or unregulated behaviours".[160] The Paris Agreement deified data transparency as the "driving force" of effective bottom-up climate mitigation.[161] This article evaluates transparency in accordance with the objective of the Paris Agreement Enhanced Transparency Framework.[162] This framework aims to promote "trust … confidence and … effective implementation",[163] and to allow "clarity and tracking of progress".[164] Consequently, there ought to be enough information and data to measure progress towards clear targets, such that public scrutiny from interested actors can actually hold actors accountable. This article will dually consider procedural legitimacy, which concerns "the openness of governance processes, such as decision-making or adjudication".[165]

Analysis of accountability can encompass a number of enquiries. Grant and Keohane define accountability as where some actors:[166]

> … have the right to hold other actors to a set of standards, to judge whether they have fulfilled their responsibilities in light of those standards, and to impose sanctions if they determine that these responsibilities have not been met.

This conception of accountability focuses on performance of obligations. Actors ought to answer for action or omission around accepted objectives, obligations or targets, and should be "sanctioned" for compliance failures.[167] But there are additional dimensions to accountability: Chan and Pattberg state that accountability requires a "coherent set of rules and procedures, delineating who takes part in decision-making", and how people are held to be responsible for their actions.[168] Gordon considers that how these rules and procedures are selected and shared are also relevant.[169] Each case study will implicate different aspects of accountability. However, based upon the above definitions of

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160 At 100.

161 Lin, above n 53, at 151.

162 United Nations Framework Convention on Climate Change "FAQ - Moving Towards the Enhanced Transparency Framework" United Nations Climate Change <unfccc.int>.

163 Paris Agreement, art 13(1).

164 Article 13(5).

165 Auld and Gulbrandsen, above n 159, at 99.

166 Ruth W Grant and Robert O Keohane "Accountability and Abuses of Power in World Politics" (2005) 99 APSR 29 at 29.

167 At 29–30.

168 Sander Chan and Philipp Pattberg "Private Rule-Making and the Politics of Accountability: Analyzing Global Forest Governance" (2008) 8 GEP 103 at 104.

169 Grant and Keohane, above n 166, at 29.

accountability, this article undertakes two main inquiries: the accountability of the organisation in defining obligations; and the accountability of the actors in fulfilling obligations.

Analysis of participation in the context of TEL engages with ideas of democratic legitimacy and equity. The Paris Agreement represents a multilateral commitment to these ideas, whether it delivers on these or not. Consequently, analysis of participation is informed by the principles underlying the Paris Agreement. The Agreement emphasises the importance of public participation:[170] who is participating in the scheme? Parties under the Agreement must take particular care to consider and engage with developing country parties and other vulnerable groups.[171] Therefore, the range of participants represented by any scheme is relevant. The leadership or governance of the scheme is important: who is making the decisions for participants? The analysis also considers what consultation was undertaken with both scheme participants and the wider community.

V CASE STUDY 1: THE PROGRESS AND PROCESS OF THE SBTI

This Part analyses the relationship between progress and process in TEL through a case study of the SBTi. The SBTi and its Corporate Net-Zero Standard coordinate Paris Agreement-aligned corporate decarbonation by defining best practice, guiding and informing target-setting, and independently assessing and approving companies' targets.[172] To join the SBTi, companies submit a letter establishing intent to set a target, before developing emissions reductions targets consistent with SBTi criteria.[173] Companies then submit their targets for validation, announce their targets publicly, and disclose company-wide emissions and progress annually.[174]

A Progress and the SBTi

1 Membership compliance

As of October 2022, there were 3,784 companies committed to taking action, 1,379 with net-zero commitments, and 1,804 with science-based targets.[175] By the end of 2021, the companies committing to science-based targets constituted more than a third of the global market economy, and 27 per cent of high-impact companies.[176] "Record numbers" of companies are committing to science-based

170 Paris Agreement, Preamble.

171 Preamble and Article 7.

172 SBTi "Ambitious Corporate Climate Action", above n 87.

173 Above n 87.

174 Above n 87.

175 SBTi Annual Progress Report 2021, above n 91, at 6.

176 At 6.

targets each year.[177] However, the significant majority of these companies are highly concentrated in Europe, America and Japan, and few companies are from heavy-emitting industries.[178]

Compliance is not uniform. With respect to compliance, Giesekam and others found that out of 81 early adopters, only a bare majority were on track to achieve their targets.[179] This assessment of target achievement is based upon information disclosed by companies. Despite the SBTi process requiring annual disclosures, in the SBTi Progress Report for 2021, they noted only 46 per cent of companies had reported progress on all targets.[180] Out of the rest, 26 per cent had reported progress on at least one target and 28 per cent on none.[181]

Companies have been significantly less successful at reporting and reducing emissions for which they are indirectly responsible. Per Giesekam and others' results, extremely limited progress has been made on Scope 3 emissions.[182] Targets which include Scope 3 emissions are significantly more likely to be behind target: 75 per cent of targets which exclude Scope 3 emissions have been achieved or are on track to be achieved, which drops to 52 per cent when Scope 3 emissions are included.[183]

2 Measurable changes from behaviour

Although obfuscated by emissions reductions caused by COVID-19, between 2015 and 2020, SBTi companies with approved targets achieved a total-emissions decrease of 29 per cent, and higher rates of emissions reductions than peers without SBTi targets.[184]

These "measurable positive changes" are modelled linearly. The SBTi considers that there will be a linear reductions rate of 8.8 per cent per annum in Scope 1 and 2 emissions.[185] Crucially, the SBTi disclaims (in a discrete footnote) that its linear modelling of future emissions reductions is a simplifying assumption that is not necessarily in line with the realities of emissions reductions.[186] Bolton and Kacperczyk observed that companies tended to reduce at higher rates in initial years, and

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177 At 6.

178 At 6.

179 Giesekam and others, above n 82, at 1.

180 SBTi Annual Progress Report 2021, above n 91, at 7.

181 At 7.

182 Giesekam and others, above n 82, at 1. Scope 3 emissions are emissions generated by supplies and end-users: see Science Based Targets, above n 88.

183 Science Based Targets, above n 88, at 14.

184 SBTi Annual Progress Report 2021, above n 91, at 7.

185 At 7.

186 At 19, n 24.

did not continue to make linear progress.[187] It is likely that as more reductions are made, there will be diminishing returns to reduction efforts. In other words, it will become more difficult to reduce at the same rate. Additionally, targets achieved later do not account for the effects of cumulative emissions for the cases where reductions are unsuccessful or occur later in the target period.[188]

The measurability of these results is also contentious. The SBTi also notes an "enduring gap in climate reporting".[189] Only 46 per cent of companies included in the SBTi analysis had reported progress on all targets, with 26 per cent only reporting progress on at least one, and 28 per cent having no public information on their progress.[190] For the 26 per cent of companies who reported on at least one target, reporting on other targets was missing entirely, lacked context and information, or was unhelpful.[191] In 2021, although there was a massive increase in participants, only 72 per cent of companies publicly reported progress against their targets—down from 87 per cent in 2020.[192]

Giesekam and others found that despite significant efforts towards increasing uptake of science-based targets, the initiative did not monitor progress against approved targets, but left companies to self-report and disclose through schemes such as the CDP (formerly the Carbon Disclosure Project).[193] They found that company reporting practices "were highly variable and often of poor quality", and that the SBTi had to improve the "transparency, consistency and comparability of targets".[194] Consequently, Giesekam and others concluded that there was a "critical gap" in the measurement, reporting and verification component of the SBTi.[195]

There is also contention as to whether the SBTi is compelling positive change or merely coordinating motivated actors. It is difficult to isolate what changes in carbon emissions by companies are due to SBTi membership. Bolton and Kacperczyk found that companies with lower initial emissions were more likely to achieve their targets.[196] Freiberg and others found that companies were

187 See Patrick Bolton and Marcin T Kacperczyk *Firm Commitments* (Research Paper, Columbia Business School, 2022).

188 Giesekam and others, above n 82, at 14.

189 SBTi Annual Progress Report 2021, above n 91, at 29.

190 At 7.

191 At 29.

192 At 29.

193 Giesekam and others, above n 82, at 2.

194 At 1.

195 At 2.

196 See Bolton and Kacperczyk, above n 187.

more likely to participate in the scheme if they had already achieved ambitious internal targets.[197] From this, it could be inferred that the SBTi is effective in coordinating behaviour of those who have already altered their behaviour, rather than those who need to modify their behaviour.

3 Ecologically effective ambition

For targets to be approved, they must be validated by the SBTi. The SBTi has rigorous target validation protocols, which are regularly updated to reflect recent climate science.[198] The SBTi states in its last progress report that 80 per cent of companies with approved targets in 2021 were aligned with halting anthropogenic climate change at 1.5°C, and 63 per cent of this group "intend to cut emissions at a higher rate than is required".[199]

Science-based targets derive significant legitimacy from "claims of expert knowledge".[200] However, even if targets are labelled as "science-based", science is not objective and can reflect the opinion of any expert, public health official or scientific literature.[201] Science-based targets are aligned with scientific evidence, but may involve compromises for responsibility and feasibility.[202] The SBTi is in the process of creating a Technical Council which will "make difficult calls based on real-world evidence" to "guide the rules and processes … need[ed] to maintain scientific credibility".[203] The SBTi claims that it excels at assessing and verifying targets to ensure they are appropriately ambitious.[204] The SBTi is aiming to scale up ambition, particularly in regions underrepresented in SBTi and the heavy-emitting industries,[205] but these regions and industries are currently still lagging significantly.

One key issue is that the scope of the target heavily influences achievement. Participants must include Scope 3 emissions in their Scope 1 and 2 emissions where Scope 3 emissions constitute 40

197 See David Freiberg, Jody Grewal and George Serafeim "Science-Based Carbon Emissions Targets" (2021) HBS Working Paper No 21-108 at 35.

198 SBTi Annual Progress Report 2021, above n 91, at 3.

199 At 6.

200 Lin, above n 53, at 163.

201 See Bedřich Moldan, Svatava Janoušková and Tomáš Hák "How to understand and measure environmental sustainability: Indicators and targets" (2012) 17 Ecological Indicators 4.

202 See Inger Andersen and others "Defining 'science-based targets'" (2021) 8 Natl Sci Rev nwaa186 at 1.

203 Luiz Amaral "Ambition, growth and evolution: Six key takeaways from the SBTi"s new strategy" (19 July 2022) Science Based Targets <sciencebasedtargets.org/>.

204 Above n 203.

205 SBTi Annual Progress Report 2021, above n 91, at 8.

per cent or more of total emissions.[206] Ninety-six per cent of companies with approved targets have their Scope 3 emissions included within that target.[207] However, accounting issues for Scope 3 emissions arise where companies use varying methods to estimate the size of these emissions,[208] which muddies the measurability of progress. The categorisation of Scope 3 emissions has also been criticised for recasting climate responsibility for outsourced corporate activity by pushing the onus for measuring and reducing emissions further down the supply chain to less powerful actors.[209]

Another determinative factor for target achievement is target ambition. A key finding by Giesekam and others was that the majority of achieved targets had had significant progress made prior to the year of SBTi approval.[210] Out of the sample of achieved targets evaluated, 89 per cent of the targets had been 40 per cent completed by the time of approval by SBTi.[211] These results suggest that the achievement of targets is positively correlated with a lack of ambition. SBTi guidelines prohibit targets which are achieved prior to submission. However, "significant" reductions may be made during target validation.[212]

The criteria for acceptance of a target allows significant variation in ambitions: with different baseline years, target years, emissions scopes, metric of measurement and unknown company action prior to the baseline year, it is impossible to compare company action.[213] More comparability is required to keep companies accountable and avoid them "gaming" targets to maximise achievement.[214]

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206 SBTi "FAQS: Do I need to inform the SBTi if my company goes through changes that may impact the target?" Science Based Targets <sciencebasedtargets.org>.

207 SBTi Annual Progress Report 2021, above n 91, at 6.

208 See Anders Bjørn and others "Can Science-Based Targets Make the Private Sector Paris-Aligned? A Review of the Emerging Evidence" (2022) 8 Curr Clim Change Rep 53.

209 Jayme Walenta "The making of the corporate carbon footprint: the politics behind emission scoping" (2021) 14(5) Journal of Cultural Economy 533 at 542.

210 Giesekam and others, above n 82, at 10–11.

211 At 13.

212 At 14.

213 At 15.

214 At 15.

B Process and the SBTi

1 Participation

The SBTi's "team" is comprised of members from its partner organisations.[215] The Executive Board includes a high-level representative from each donor and partner organisation providing strategic and resourcing input.[216] The Executive Leadership Team is responsible for both day-to-day decisions and the design and implementation of the SBTi's strategy and technical guidance.[217] Volunteer advisors and experts provide their technical and scientific guidance.[218] The SBTi has been criticised for having a decision-making body compromised of members from only four NGOs, because this limited membership devalues citizen participation.[219] Company involvement is dominated by European firms.[220] The participating companies in the SBTi are predominantly based in Europe, the United States and Japan, with few represented from the rest of Asia, Africa and South America.[221]

With respect to consultation, according to SBTi, the development of its Net-Zero Standard followed an inclusive and transparent process involving input from stakeholders and "close consultation" with experts.[222] The SBTi had more than 500 participants attend its public webinars introducing its principles to inform the Net-Zero Standard.[223] SBTi received more than 80 written responses, and recorded a number of perspectives, which it published.[224] SBTi upheld stances which enhanced the efficacy of the standard (for example, the maintenance of value chain abatement)

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215 SBTi "Meet the Team" Science Based Targets <sciencebasedtargets.org>.

216 SBTi "Organizational Governance" Science Based Targets <sciencebasedtargets.org>.

217 Above n 216.

218 Above n 216.

219 Jonathan Pickering, Karin Bäckstrand and David Schlosberg "Between environmental and ecological democracy: theory and practice at the democracy-environment nexus" (2020) 22 Journal of Environmental Policy and Planning 1 at 7.

220 SBTi Annual Progress Report 2021, above n 91, at 16.

221 At 6.

222 Science Based Targets, above n 88.

223 Alberto Carrillo Pineda, Andres Chang and Pedro Faria *Foundations for Science-based Net-Zero Target Setting in the Corporate Sector* (SBTi, Net-Zero Standard, September 2020) at 39 (Annex 1).

224 At 39 (Annex 1).

despite clear opposition from consulted stakeholders.[225] SBTi did make some revisions, but this was mostly for clarity.[226]

2 Transparency

With respect to procedural transparency, the SBTi claims to have a "proven, sophisticated and well-established" process for creating standards and guidance, and that its standardisation guarantees transparency.[227] One of SBTi's credibility-bolstering claims is that target validation ensures transparency and standardisation.[228] However, in January 2022, the SBTi estimated that some companies would have to wait up to a year for validation.[229] Although this was reduced by 70 per cent in six months,[230] the SBTi still includes committed, but unvalidated companies in its "membership" numbers.

With respect to outcome transparency, the SBTi states that companies with science-based targets are cutting more emissions than those without,[231] but also found that less than half (46 per cent) of validated-target companies were actually disclosing their progress on all targets.[232] SBTi's yearly progress report uses information "provided to the SBTi, public CDP disclosure data, information retrieved from company sustainability reports and websites, and publicly available data on global insights and market capitalisation".[233] As noted above, there is a gap in reporting practices which makes it extremely difficult to accurately measure the progress of all companies.[234] Of the targets assessed by Giesekam and others, 21 per cent had to be excluded from analysis due to a lack of publicly available information, and the information for many more companies took "considerable effort" to obtain.[235] It cannot be that the 26 per cent of companies who did not report on all targets, and the 28 per cent of companies who reported on no targets, merely forgot to disclose their information. If companies have made insignificant or negative progress on these targets, which is

225 At 42 (Annex 1).

226 At 42 (Annex 1).

227 Amaral, above n 203.

228 Above n 203.

229 Above n 203.

230 Above n 203.

231 Above n 203.

232 SBTi Annual Progress Report 2021, above n 91, at 7.

233 At 3.

234 At 7.

235 Giesekam and others, above n 82, at 15.

likely but unknown, this could significantly impair the progress achieved by the companies participating in the SBTi.

3 Accountability

In terms of institutional accountability, the Executive Board is comprised of members from its four partner organisations,[236] and only appears to be accountable to its partner organisations. The SBTi is currently being incorporated to be "linked but separate from [its] founding partners", to be able to work "more efficiently and effectively", and "get more done in less time",[237] but this explanation does not speak to improved process.

The SBTi needs to draw in participating firms. The Net-Zero Standard allegedly ensures that targets are credible and robust through its target validation process. This validation process requires that each company is assigned to a reviewer and approver, each employed by two different partner organisations.[238] However, this is not best practice validation, which requires an independent double-blind peer review.[239] Currently, validation under the SBTi is done completely internally, and none of the review information, discussions or approval notes are publicly disclosed.[240] This internal regulation, in combination with the lack of comparable and available information on target achievement, does not ensure accountability.

There is limited accountability for actors within the SBTi. There are no penalties for lack of progress.[241] Although the SBTi reserves the right to remove any company from its website and materials,[242] "[t]here will be no public announcement or related media publications" if this is deemed necessary.[243] Per an SBTi representative, the initiative is about "promoting best practices rather than punishing or shedding a red light on who is not performing well".[244] The SBTi considers that any

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236 SBTi "Meet the Team", above n 215.

237 Amaral, above n 203.

238 SBTi Annual Progress Report 2021, above n 91, at 36, n 50.

239 COPE "Peer review processes" <publicationethics.org>; and Soh Young In and Kim Schumacher "Carbonwashing: ESG Data Greenwashing in a Post-Paris World" in Thomas Heller and Alicia Seiger (eds) *Settling Climate Accounts: Navigating the Road to Net Zero* (Palgrave Macmillan, Cham (Switzerland), 2021) 39 at 49.

240 At 49.

241 Giesekam and others, above n 82, at 15.

242 Lea Ottilie Fink "What drives firms to successfully cooperate on climate change? - an institutional analysis of the Science Based Targets initiative" (MSc Thesis, Humboldt University of Berlin, 2018) at 58.

243 Lucy Hayes "Frequently asked questions about science based targets" (22 July 2020) ecoact <eco-act.com>.

244 Fink, above n 242, at 58.

consequences of failing to meet a target would be reputational.[245] However, in the absence of transparent information about this failure, it seems doubtful there will be reputational accountability.

The SBTi notes that it is aiming to enable greater scrutiny by hiring a Director of Compliance who will ensure compliance with policies and procedures within the SBTi, and establish a formal complaints mechanism and "other governance enhancements".[246] As it stands, this scrutiny remains absent from SBTi processes. The SBTi is allegedly making efforts to change focus from target-setting to "measurement, reporting and verification" to enhance corporate accountability on progress.[247] However, this focus has not yet come to fruition. SBTi keeps case studies on companies publicly available,[248] which could promote accountability, but these "testimonials" are more focused on publicising the benefits of participating in the scheme. The SBTi also receives funding from many participating companies in many different sectors, such as Nike Inc, Target Corp and the BMW Group.[249] Accountability measures may jeopardise this funding.

C A Lack of Process Compromises Progress

In sum, it would appear that the SBTi has achieved progress by sacrificing process. A notable example would be consulting with participants, but only giving limited consideration to said consultation in order to have a more effective target-setting scheme. Governance from its four founding organisations streamlines process to ensure progress is made "more efficiently and effectively".[250] The SBTi fills a gap: making progress that would not otherwise be achieved. The main accomplishment of the SBTi is the consolidation and standardisation of efforts. The SBTi Net-Zero Standard was launched to remedy the "deficit of credibility and surplus of confusion over [corporate] emissions reductions and net-zero targets, with different meanings and metrics".[251]

The SBTi has a "key agenda-setting role" in setting targets and establishing a methodology.[252] It is indisputable that the SBTi is achieving *some* progress. However, *quantifying* this progress is difficult. The SBTi has self-identified issues surrounding geographic and sectorial representation, and

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245 At 59.

246 Amaral, above n 203.

247 SBTi Annual Progress Report 2021, above n 91, at 8.

248 SBTi "Case Studies" Science Based Targets <sciencebasedtargets.org>.

249 SBTi "How We Are Funded" Science Based Targets <sciencebasedtargets.org>.

250 Amaral, above n 203.

251 António Guterres, Secretary-General of the United Nations "Opening Remarks" (Caring for Climate 2021, United Nations Global Compact, 10 November 2021). This speech can be found on YouTube at the following link: <https://www.youtube.com/watch?v=xKupJA8DmwA&ab_channel=UnitedNationsGlobalCompact>.

252 Giesekam and others, above n 82, at 18.

transparent disclosure and reporting practices.[253] These are flaws characteristic of NGOs, which are often scrutinised for a lack of "transparency, democracy, and accountability".[254] SBTi's lack of emphasis on the measurement, reporting, and verification of carbon emissions has comprised the measurability, credibility and verifiability of progress. Although companies may be "on target", this is subject to the target design, scope and ambition.[255] Regulatory compliance, mandated by clear monitoring and validation programmes, is essential for accountability and the legitimacy of targets.[256] As stated by the SBTi itself, it needs to, and is now attempting to, shift its focus from target-setting and uptake to measurement, reporting and verification of carbon emissions. Reserving process improvements for the future means that the SBTi has achieved all progress so far in the absence or at the expense of process.

This analysis of the SBTi highlights the relationship between transparency and accountability: transparency enables accountability. Without transparent target verification and progress reports, companies who are striving to achieve said targets cannot be held accountable for compliance failures. Compliance cannot even be tracked. Similarly highlighted is the relationship between accountability mechanisms and credible progress. Where these accountability mechanisms are lacking, progress reports are not reputable. SBTi fails to make performance legible beyond grand gestures. In the absence of a mandatory reporting component, "the initiative does not represent a substantive tool for achieving greater levels of ambition" as there is no transparency or accountability for a lack of progress.[257] The fact of the matter is that, in the absence of more and better quality process, the progress achieved by the SBTi is illegible. In the case of the SBTi, a lack of process clearly compromises progress.

Process shortcomings such as limited consultation and participation could analogously compromise progress by reducing the participating membership. Sectoral and geographic representation in the SBTi is self-admittedly poor. Sizable and wealthy corporate players can participate more, fund more, and ultimately influence more. Improving the breadth of its membership may require increased consultation with companies across a wider range of sectors and countries. This is purported to be a current priority of the SBTi.

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253 SBTi Annual Progress Report 2021, above n 91, at 32.

254 Rana Lehr-Lehnardt "NGO Legitimacy: Reassessing Democracy, Accountability and Transparency" (paper presented to the 2nd annual LLM Conference at Cornell Law School, New York, 16 April 2005) at 1.

255 Giesekam and others, above n 82, at 17.

256 Hanneke AA van Haeff "Organizational legitimacy as an incentive for companies to set *science-based targets* and shape a more attractive investor profile: An investor's perspective" (Master Thesis, Utrecht University, 2021) at 33.

257 Giesekam and others, above n 82, at 18.

There is an observable trade-off between progress and process: participants must be enticed to join voluntary standards. Onerous disclosure and reporting mechanisms in combination with strict non-compliance measures would hardly "draw in the punters". It is suggested that some degree of accountability and transparency is necessary to draw participants into the scheme, so the initiative has sufficient legitimacy to create a reputational benefit.[258] This article argues that SBTi achieves *enough* progress to gain participants, but does not achieve meaningful progress.

VI CASE STUDY 2: THE PROGRESS AND PROCESS OF C40

This Part analyses the relationship between progress and process in TEL through a case study of C40. C40 and its performance-based membership requirements commit member cities to delivering climate action plans consistent with the Paris Agreement's 1.5°C ambition. The C40 Leadership Standards prescribe the minimum requirements for member cities.

Within the decade, C40 is striving to halve the emissions of its member cities, whilst promoting sustainable development.[259] In making progress, C40 is a "knowledge broker",[260] in that it emphasises sharing research and information to "support and empower cities to transition towards a green and just economy".[261] The general ethos of C40 is that cities act, while states talk.[262] C40 claims that "no one can do more to produce good outcomes for the world than we, the mayors of great cities".[263] The claim that global cities produce 70 to 80 per cent of global greenhouse gas emissions is leveraged to engage stakeholders, and empower and resource the organisation.[264]

C40 mayors commit to taking urgent climate action by signing accelerator pledges (previously known as declarations).[265] These accelerators drive "high-impact actions" and constitute part of the delivery requirement of membership.[266] Accelerators focus on various sectors or categories including transport, energy and buildings, adaption, waste, food, air quality and clean construction.[267]

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258 Van Haeff, above n 256, at 38–39.

259 C40 Cities "About C40", above n 102.

260 Lin, above n 53, at 102.

261 C40 Cities "Research & Knowledge" <www.c40.org>.

262 Ciara Nugent "Companies Brought Big Promises to COP26. Cities Brought Actions" *Time* (online ed, New York City, 12 November 2021).

263 Michael Bloomberg "Keynote Address at 2011 Sao Paulo C40 Cities Summit" (C40 Cities Workshop, San Paulo, 1 June 2011) as cited in Gordon, above n 84, at 82.

264 Gordon, above n 84, at 85.

265 C40 Cities "High-Impact Accelerators" <www.c40.org>.

266 Sadiq Khan and Mark Watts *C40 Annual Report 2021* (C40 Cities, Annual Report, 28 March 2022) at 6.

267 At 9–10.

C40's Global Green New Deal establishes the normative foundation of its network and action.[268] The Deal launched in 2019 and envisages an economic paradigm shift, backed by action, as the method of achievement of sustainable climate action.[269] The C40 encourages movement towards a "downscaled" version of doughnut economics: the City Portrait model.[270] The City Portrait model is inspired by "doughnut economics": a framework for sustainable development which advocates for a refocusing of development to "build healthy, sustainable and resilient urban communities" which "secures lives and livelihoods".[271] To C40, climate change is not merely a threat, but an investment opportunity: it is highlighted that climate actions will give member cities a competitive edge in the market in terms of green growth and future resilience.[272]

A Progress and C40

1 Membership compliance

C40 boasts a membership of almost 100 "world-leading" cities.[273] These cities, directly represent 582 million residents or 20 per cent of global GDP, and influence 896 million transient workers or residents or 36 per cent of global GDP.[274] There are three tiers of membership of C40: Megacities, Innovators and Observers.[275] Both Megacities and Innovators must show exceptional climate leadership at a global level, but Megacities must be projected to have a population of at least three million by 2030.[276] Observer cities are those which are eligible for either the Megacity or Innovator

268 C40 Cities "Statement by the C40 Cities Steering Committee on the organisation's new Leadership Standards", above n 101.

269 C40 Cities "Global Green New Deal" <www.c40.org>.

270 Doughnut Economics Action Lab and others *Creating City Portraits: A methodological guide from the Thriving Cities Initiative* (Oxford, July 2020) at 7.

271 C40 Cities Climate Leadership Group and others "Creating City Portraits: A methodological guide from the Thriving Cities Initiative" (July 2020) C40 Cities <www.c40knowledgehub.org>; and Kate Raworth *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (Random House Business Books, London, 2017).

272 Milja Heikkinen, Tuomas Ylä-Anttila and Sirkku Juhola "Incremental, reformistic or transformational: what kind of change do C40 cities advocate to deal with climate change?" (2019) 21 Journal of Environmental Policy and Planning 90 at 98.

273 C40 Cities "About C40", above n 102.

274 Khan and Watts, above n 266, at 5.

275 C40 Cities "C40 Cities Membership" (23 September 2022) <www.c40.org>.

276 Above n 275.

category, but require further approval due to local regulatory requirements.[277] All member cities are subject to the Leadership Standards.[278]

C40 aims to minimise compliance issues through selective membership criteria.[279] However, perversely, C40's performance-based membership does not result in complete compliance. The first requirement of the C40 Leadership Standards is that each member city has a regularly updated Climate Action Plan consistent with 1.5°C-ambition.[280] However, according to C40's 2021 report, only 61 of the 97 member cities (63 per cent) actually have the prescribed Climate Action Plans.[281] C40 states that "a significant majority" of C40 cities had Climate Action Plans, and were able to conclude these in "record time" due to resourcing facilitating by the C40 network.[282] However, even a "significant majority"—or 63 per cent—of Climate Action Plan adopters reveals 37 per cent non-compliance by members with the first requirement of membership.[283] C40 then quantifies and measures delivery on these plans (the second requirement) through "high-impact action" monitoring.[284] Compliance or achievement with the remaining three membership requirements is not quantified.[285]

One quantifiable goal of C40 was Deadline 2020, which sought to have cities take transformational changes before 2020, which would be necessary to meet the level of ambition in the Paris Agreement.[286] Deadline 2020 called for massive emission cuts, massive investment, and for wealthy cities to *peak* their carbon emissions *before* 2020.[287] Thirty member cities managed to peak their emissions.[288] The remaining cities were found to have made "concrete commitments" to meet the goal,[289] but had ultimately failed to do so.

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277 Above n 275.

278 Above n 275.

279 Lin, above n 53, at 106.

280 Khan and Watts, above n 266, at 9.

281 At 9.

282 At 9.

283 At 9.

284 At 9.

285 At 9.

286 C40 Cities and ARUP *Deadline 2020: How cities will get the job done* (November 2016).

287 Above n 286.

288 C40 Cities "30 of the world's largest and most influential cities have peaked greenhouse gas emissions" (press release, 8 October 2019).

289 Above n 288.

2 *Measurable changes from behaviour*

C40 claims that cities are able to be more responsive than national governments.[290] It attributes successful behavioural change to its collaborative peer-to-peer learning model.[291] "City-to-city sharing" is the foundation of the C40 model, allowing best practice to be modelled and then "rapidly replicated" on a global basis.[292] This interactive norm diffusion promotes action through "positive peer pressure" which allows cities to "leapfrog their peers" in scaling up ambition.[293] C40 reported more than 600 interactions by member cities in 2021 with C40 resources, including webinars, workshops and city-to-city pairings.[294] C40 considers that its Knowledge Hub resources climate action through the provision of reliable information and guidance,[295] and promotes norm diffusion beyond immediate C40 membership. According to its consultation, 87 per cent of Knowledge Hub articles are positively rated, and 85 per cent of cities "reported [being] able to act after visiting".[296] This claim is not further substantiated.

According to C40's Accelerator Reports, member cities have delivered more than 270 ambitious actions, with over 900 to be completed by 2030.[297] In 2021, C40 stated that its member cities achieved 68 new "high-impact climate actions" across eight sectors, bringing the total high-impact actions made by the C40 scheme to 871 actions.[298] "High-impact actions" are those which fall within the high-impact accelerator sectors.[299] C40 cites examples of these 2021 high-impact actions, such as "city-wide speed restrictions to increase road safety".[300] C40 claims that its initiative results in incremental cross-sectoral change. For example, 50 cities have made "high-impact" climate actions in the Air Quality Accelerator category.[301] Due to this, C40 states that it saw a 5 per cent improvement in µg/m3 $PM_{2.5}$ levels (airborne particles generated from burning fossil fuels) in 2021 compared with 2020.[302]

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290 Austin Mayor Steve Adler in Nugent, above n 262.

291 C40 Cities "Our History" <www.c40.org>.

292 Khan and Watts, above n 266, at 4.

293 At 4.

294 At 5.

295 At 5.

296 At 5.

297 C40 Cities "Accelerator Reports" <www.c40.org/>.

298 Khan and Watts, above n 266, at 6.

299 C40 Cities "High-Impact Accelerators", above n 265.

300 Khan and Watts, above n 266, at 9.

301 At 6.

302 At 7.

These kinds of discrete actions are difficult to measure: equating regulatory traffic speed-limits with other unrelated actions does not provide insight into the efficacy of the scheme in influencing climate action. Empirical research has found that C40 membership has a statistically significant effect on the number of actions taken.[303] Even after:[304]

> controlling for city population size, regional GDP, the left-right political placement of local and national governing parties, and the quantified prioritization of sustainability and environmental issues of the local and national governing parties

member cities took six times as many actions as non-member cities.

Some cities' actions are truly impressive: for example, Oslo's climate budget forces local legislators to prove spending is consistent with emission targets, which has put Oslo on track to halve its emissions by 2022 compared with 1990 levels.[305] However, examining non-linear, discrete indicators of change does not lend itself to prospective analysis.[306] Additionally, Gordon and Johnson allude to, but do not conclude on, the possibility that C40 membership might not be the cause of these actions.[307] This is due to the fact that the targets and climate actions proposed in the cities studied were very similar, despite wildly different levels of economic development, infrastructure and citizen well-being.[308]

Many commentators have noted that C40 action goes beyond greenwashing,[309] and that C40 has stimulated a "demonstrable increase" in the extent and number of efforts.[310] However, there is a need for more focus on "specific, identifiable emissions reductions".[311] Actions by C40 members are so disparate and diverse that they are incredibly difficult to measure, compare and track compared with objective metrics such as emissions reductions. The C40 was a partner in the creation of the Global

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303 Bridget Killian "Does More Mean Better? The Effectiveness of City Networks on Emissions Reduction Activity" (MA Thesis, University of North Carolina, 2021) at iii.

304 At 30.

305 Nugent, above n 262.

306 David J Gordon and Craig A Johnson "City-networks, global climate governance, and the road to 1.5°C" (2018) 30 Curr Opin Environ Sustain 35 at 37.

307 Kathryn Davidson, Lars Coenen and Brendan Gleeson "A Decade of C40: Research Insights and Agendas for City Networks" (2019) 10 Global Policy 697 at 699.

308 Gordon and Johnson, above n 306, at 36.

309 See C40 Cities Climate Leadership Group and C40 Knowledge Hub "How to set up monitoring, evaluation and reporting for your city's climate action plan" <www.c40knowledgehub.org>.

310 Gordon and Johnson, above n 306, at 36.

311 At 36.

Greenhouse Gas Protocol for Cities which enables emissions reporting and is utilised by its member cities.[312] However, collective and individual emissions reduction tracking is not C40's core focus.

3 Ecologically effective ambition

C40 adopts the ambition of Paris Agreement, and states that "[i]n all cases, transformational change is a necessity".[313] Empirical findings suggest that C40 currently supports incremental change, but rarely anything transformational that will influence the status quo.[314] C40 claims that its membership requirement mandating "1.5°C-aligned city action plans to protect residents, create jobs, address inequalities and tackle the global climate crisis" represents an ambition unmatched by any other grouping.[315] It has been observed that C40's reframing of the climate problem from pure emissions reductions to a mission for sustainable development enables higher ambition, through sidestepping the contentious issues obstructing the UNFCCC regime.[316] Conversely, it has also been argued that the current target-setting practices of C40 are unconnected to realistic delivery, and derive from vanity rather than any desire for transformation.[317]

B Process and C40

1 Participation

C40 has made an attempt to appear to allow equitable participation from different groups. C40 was born as C20 in 2005 from 18 megacities, becoming C40 after a further 22 mayors were invited to join the group.[318] According to C40, these invitations aimed to engage with more cities in the Global South.[319] Most member cities have also signed an Equity Pledge which aims to mitigate the inequitableness characterising most collective action on climate change.[320] The C40 claims to be committed to being diverse and inclusive: it has established a Diversity, Inclusion and Anti-Racism

312 At 36. See also Greenhouse Gas Protocol *The GHG Protocol for Cities* (GHG Protocol, Version 1.1, January 2021).

313 C40 Cities "1.5°C Climate Action Plans" <www.c40.org/>.

314 Heikkinen, Ylä-Anttila and Juhola, above n 272, at 98.

315 Khan and Watts, above n 266, at 9.

316 Lin, above n 53, at 148.

317 Håvard Haarstad "Do Climate Targets Matter? The Accountability of Target-setting in Urban Climate and Energy Policy" in Siddharth Sareen (ed) *Enabling Sustainable Energy Transitions* (Palgrave Pivot, Cham (Switzerland), 2020) 63 at 64.

318 C40 Cities "Our History", above n 291.

319 Above n 291.

320 C40 Cities "Equity Pledge" <www.c40.org/>.

Board to oversee delivery of its Equity, Diversity and Inclusion strategy.[321] However, the membership requirements of the C40 restrict participation to large industrialised cities or those with the economic capacity to engage in long-term climate planning.[322] Despite efforts, C40 has been criticised for perpetuating the enduring Global North–South divide.[323]

C40 is embedded in, and therefore perpetuates, a system of structural inequality.[324] The C40 City Climate Leadership Group Inc, C40's main operating entity, is incorporated in Delaware as a non-stock, not-for-profit corporation.[325] C40 is governed by an elected Steering Committee of mayors, and the Board of Directors also provides operational oversight.[326] The President of the Board, appointed by the Chair, is Michael Bloomberg (former Mayor of New York City).[327] C40 has been criticised for "unevenness":[328] despite appearing horizontal, there is a central governing "clique" (London, New York City and several other cities) which excludes more peripheral members.[329]

C40 purports to prioritise consultation with both members and member city constituents. C40 has "internal channels" for staff to communicate with the board through working groups and also has a Staff Consultation Forum with regional local representatives.[330] For example, when formulating Deadline 2020, C40 engaged with the community to create the plan, to outline environmental, social, and economic benefits from implementation, and to ensure equitably distributed benefits.[331] C40 also "welcome[d]" suggestions for improvement after the implementation of the plan, "inviting all partners to read and review" and provide input.[332] More generally, C40 strongly prioritises accessible information and resourcing for cities from cities on its C40 Knowledge Hub.[333]

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321 Khan and Watts, above n 266, at 15.

322 Gordon and Johnson, above n 306, at 38.

323 Sofie Bouteligier "Inequality in new global governance arrangements: the North-South divide in transnational municipal networks" (2013) 26(3) Eur J Soc Sci 251 at 263–264.

324 See David Wachsmuth, Daniel Aldana Cohen and Hillary Angelo "Expand the frontiers of urban sustainability" (2016) 536 Nature 391.

325 Khan and Watts, above n 266, at 14.

326 At 14.

327 At 14.

328 See Michele Acuto "The new climate leaders?" (2013) 39 RIS 835 at 854.

329 Bouteligier, above n 323, at 262.

330 Khan and Watts, above n 266, at 15.

331 Bouteligier, above n 323, at 263.

332 C40 Cities and Arup *Deadline 2020* (C40 Cities, November 2016) at 14.

333 C40 Knowledge Hub "Climate Action Planning" <www.c40knowledgehub.org>.

2 *Transparency*

C40's outcome transparency is operationalised by data disclosure. A core mantra of C40 is "[i]f you can't measure it, you can't manage it and you can't fix it".[334] C40 membership requires transparent disclosure of emissions and governance actions: commitment to the scheme "must be matched by an equal willingness to be judged by our progress".[335] C40 claims to provide more transparency than any other political grouping focusing on climate action.[336] C40 further claims that the Global Greenhouse Gas Protocol for Cities provides a "robust framework for accounting and reporting city-wide emissions".[337] According to C40, member cities first report their data through City Inventory Reporting and Information System, which enables transparent calculation and reporting of sectorial emissions.[338] This data can then be uploaded to the public reporting platform CDP Cities.[339] The Global Greenhouse Gas Protocol for Cities reports are publicly available,[340] which enables comparison of emissions across cities on a sectoral basis.[341] However, problems arise with verification. Users "*may choose*" to verify their greenhouse gas inventory through the Global Greenhouse Gas Protocol for Cities inventory *self-verification toolkit*.[342] Consequently, unless member cities choose to self-verify their emissions reductions, there is no assurance to users that their "transparent" greenhouse gas inventory "represents a faithful, true, and fair account" of emissions.[343] Although the Protocol consolidates information, it has been criticised for a "disconnect" between the measured emissions and actual emissions.[344] Hughes and Tozer claim that the Protocol relies on

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334 Kelly Shultz, Hanya Gartner and Kyra Appleby "How data is empowering city climate action" (30 August 2017) C40 Cities <www.c40.org>.

335 Michael Bloomberg "Keynote Address at 2010 Hong Kong C40 Cities Workshop" (C40 Cities Workshop, Hong Kong, 5 November 2010) in Gordon, above n 84, at 85.

336 Khan and Watts, above n 266, at 9.

337 C40 Cities Climate Leadership Group, ICLEI and World Resources Institute "The Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC)" (December 2014) C40 Knowledge Hub <www.c40knowledgehub.org>.

338 C40 Cities Climate Leadership Group "City Inventory Reporting and Information System (CIRIS)" (May 2022) C40 Knowledge Hub <www.c40knowledgehub.org>.

339 Above n 338.

340 C40 Knowledge Hub "Greenhouse gas emissions interactive dashboard" (September 2022) <www.c40knowledgehub.org>.

341 C40 Cities Climate Leadership Group "Exploring the benefits of consistent and comparable city-wide greenhouse gas emission inventories" (October 2018) C40 Knowledge Hub <www.c40knowledgehub.org>.

342 CDP and ICLEI "2023 Cities Reporting Guidance" CDP Guidance <www.guidance.cdp.net> (emphasis added).

343 Above n 342.

344 Gordon and Johnson, above n 306, at 36.

"downscaling" of data from sectors like energy consumption and transportation, which leads to uncertain accuracy and relevance.[345]

C40 has been criticised for its focus on specific data. Data-driven decision-making is increasingly emphasised in environmental action,[346] fuelled by markets and monetisation.[347] Hypothetically, online platforms and data collection techniques increase transparency and visibility of action.[348] However, transparency around outcome data is often curated. Cities can be incentivised to focus on specific nominal targets regardless of whether they actually represent actions taken.[349] Data can be interpreted and measured in a non-objective way: the production of data and the use of certain datasets over others can skew appearances.[350]

In terms of procedural transparency, C40 does attempt to deliver. C40 has transparent governance arrangements, which have already been established above. When implementing decisions such as Deadline 2020 or the Global Greenhouse Gas Protocol for Cities, C40 "took pains to be as transparent in their deliberations and decision-making processes as possible", and consulted with member and non-member cities.[351] C40 claims to prioritise detailing the governance structure and capacity of each of its member cities, and to prioritise identifying who needs to be engaged to "accelerate" delivery of goals.[352] C40 claims to publicly identify all initiatives undertaken, and to set "clear, quantifiable benchmarks" and regularly assess these.[353] It is disputed that the global aspect of C40 creates tensions in terms of transparency: rather than prioritising clear disclosure on climate action to constituencies, member cities are focused on demonstrating their investment potential.[354]

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345 At 36.

346 Sara Hughes, Sarah Giest and Laura Tozer "Accountability and data-driven urban climate governance" (2020) 10 Nat Clim Change 1085 at 1085.

347 See Arthur P J Mol "The Future of Transparency: Power, Pitfalls and Promises" (2010) 10 GEP 132.

348 Hughes, Giest and Tozer, above n 346, at 1086.

349 At 1086.

350 At 1087.

351 Lin, above n 53, at 165.

352 C40 Cities "1.5°C Climate Action Plans", above n 313.

353 Michael Bloomberg "Keynote Address at 2010 Hong Kong C40 Cities Workshop" (C40 Cities Workshop, Hong Kong, 5 November 2010) in Gordon, above n 84, at 85.

354 Hughes, Giest and Tozer, above n 346, at 1088.

3 Accountability

With respect to organisational accountability, C40 has been "at the forefront" of the global city accountability movement for climate action,[355] and has designed its own extensive accountability forums.[356] Member cities have domestic accountability to both citizens and upper levels of government.[357] Local government accountability is driven by democratic processes and public participation.[358] However, through C40, cities "seek to be *globally* accountable" for climate actions outside this formal institutional capacity.[359] This global accountability is measured through measurement, reporting and disclosure.[360] Through disclosure and progress reporting, C40 cities attempt to hold themselves accountable for taking "real, measurable action".[361] C40 cities operationalise accountability as ensuring "performance [is] legible" for target audiences.[362] However, it is disputed by commentators that the manner in which performance is accounted for is depoliticising,[363] and that the definition of objectives creates accountability gaps.[364]

On the surface, C40 appears to be "a more rigorous form" of climate governance.[365] However, it is disputed by commentators that growing numbers of accountability systems does not necessary result in more progress in climate change mitigation.[366] Focus must be had on the processes which select the "good outcomes" that cities purport to chase, and how they can plan to achieve them.[367] There is a tension between the accountability gestures of C40 and actual accountability for achieving

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355 Gordon, above n 84, at 84.

356 Hughes, Giest and Tozer, above n 346, at 1089.

357 Gordon, above n 84, at 84.

358 Hughes, Giest and Tozer, above n 346, at 1085.

359 Gordon, above n 84, at 84 (emphasis in original).

360 At 84.

361 CDP "Wealthier, Healthier Cities Emerge from Climate Change Initiatives Finds New CDP Report" (press release, 24 June 2013).

362 Gordon, above n 84, at 92.

363 At 95.

364 Robert Keohane "Global governance and democratic accountability" (Miliband Lectures, London School of Economics, London, delivered 2002, published 2013) at 14.

365 Gordon, above n 84, at 82.

366 See Adil Najam and Mark Halle "Global Environmental Governance: The Challenge of Accountability" (2010) 5 Sustainable Development Insights 1.

367 Gordon, above n 84, at 83.

progress.[368] Cities aim to achieve high-impact actions, which are thematically organised to promote the legibility of cumulate efforts. High impact actions represent "a means of counting without being accountable".[369] C40 tends to "align public accountability imperatives with narrow objectives informed by private interests".[370] Consequently, the standardisation, disclosure and transparency ensure "symbolic" rather than actual accountability.[371] This has been dubbed a "crisis of accountability": allowing capitalisation on climate action rhetoric without action.[372]

With respect to the accountability of member cities for their action, there is a lack of holding to account over a lack of delivery on obligations. There is only 67.8 per cent compliance with the first membership requirement,[373] which is not insignificant. Fulfilling the other four membership requirements is contingent upon fulfilling the first planning requirement. Without these plans, cities cannot be held accountable to claims, because they have not made any. In 2021, with respect to delivery on plans, cities thoroughly reported their progress on their accelerator pledges.[374] This report focused on the five longest-running C40 accelerators and documented the "impactful climate action[s]" cities commit to and accomplish.[375] Member cities were also "encouraged" to report on Equity Pledge commitments through this process.[376] There are three cities listed as inactive due to failure to comply with the C40 Leadership Standards for at least 12 consecutive months: Moscow, Santiago and Yokohama.[377] Where members "persistently fail to comply", their membership will be reviewed and revoked "as appropriate".[378] This alleged threat of revocation of membership has never publicly been enforced. C40 perceives that withdrawing membership from under-performing cities is

368 At 93–94.

369 At 94.

370 At 94.

371 At 94.

372 Haarstad, above n 317, at 63.

373 Khan and Watts, above n 266, at 9.

374 C40 Cities "High-Impact Accelerators", above n 265.

375 C40 Cities "Accelerator Reports", above n 297.

376 Above n 297.

377 C40 Cities "C40 Cities Membership", above n 275.

378 Above n 275.

"serious and drastic",[379] and has previously identified its tactic as informal engagement to motivate improvement.[380] Lenient enforcement can limit successful action.[381]

C Investment-Driven Process Compromises Progress

C40 purports to have the most ambitious progress and process out of any political grouping. This is certainty the message promoted by their marketing. C40 publicly takes accountability for the massive portion of emissions produced by cities and uses this claim to legitimise its action. C40 has pages upon pages of accountability and transparency-enriching resources. C40 champions its Equity Pledge and its efforts to engage meaningfully with both member cities and constituents, and appears to put a significant amount of energy into achieving both process and progress.

However, it is significantly more difficult to measure and quantify C40's progress than that achieved by SBTi. This seems at odds with the immense energy C40 puts into advertising its process. C40 is achieving progress, quantifiable through its core "high-impact action" metric and through the emissions tracking schemes it has had a role in establishing. This progress is partly driven by the reflexivity of cities, and the relative ease with which they can implement policy compared with states.

However, *by design*, C40's process mechanisms purporting to enhance transparency and accountability do not enable clear assessment of member progress which is measurable, comparable or representative of action. This is because C40's goal in pursuing process is *not progress*, but performance legibility for optics purposes. This illustrates a trade-off between *quality process* and *measurable progress.*

C40's leadership and influence has been lauded, and it does seemingly put an emphasis on transparency, equity and participation. However, increases in process do not necessarily create more progress if that process is not effective.[382] C40 has ample process—enough to make performance legible, but not clear. C40's progress is "a means of counting without being accountable".[383] C40's process is process-for-processes-sake, or more accurately, process-for-investments-sake. C40 uses the claim of "performance-based" membership to bolster legitimacy. However, C40's target audience is not the global public or constituents, but investors in its development programmes.

The achievement of "high-impact actions" gives C40 the appearance of achieving "high-impact progress". Progress is all in the definition: "high-impact actions" are so disparate and diverse that they

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379 Interview with Manager of C40 (Jolene Lin, Skype, 30 June 2016) cited in Lin, above n 53, at 113.

380 Lin, above n 53, at 113.

381 See Jeroen van der Heijden *Governance for Urban Sustainability and Resilience Responding to Climate Change and the Relevance of the Built Environment* (Edward Elgar Publishing, Cheltenham (UK), 2014).

382 See Najam and Halle, above at 366.

383 Gordon, above n 84, at 94.

are incredibly difficult to measure, compare and track. C40's "high-impact action" focus allows member cities to shoehorn a number of different policy changes into climate action. Rather than enhancing accountability, the performance metric shifts the focus of accountability. Process is used by C40 as a means of securing recognition: "[a]ccountability is not always about being accountable, but rather offers a means of securing authority and legitimacy".[384]

According to C40, its process maximises "bang for buck".[385] Through C40, member cities pursue recognition for both public and private purposes:[386] publicly they seek engagement, empowerment and resourcing,[387] whilst privately they seek to augment their investment value through trustworthiness.[388] This is not an issue per se: actors will always be economically motivated by some degree. TEL is largely motivated by market forces.[389] C40 "may be contesting the *who* of global climate governance", but it "remain[s] firmly embedded in reproducing the prioritisation of economic over environmental objectives".[390] However, is the world in any position to be picky? Does it truly matter if process is motivated by money, rather than environmental progress? The issue arises when process is *only* concerned with demonstrating investability and curates "progress" accordingly, such that the achievement and measurability of progress are compromised. It is contended that C40 process inhibits progress through the prioritisation of narrow metrics.[391] Dually, it is contended that the design of C40's process measures legitimise actions, without holding member cities or C40's institutions to account.

VII CAN WE FORSAKE PROCESS FOR PROGRESS?

This article has evaluated the relationship between progress and process for two pre-eminent examples of TEL: the SBTi and C40. Finally, in this Part, this article answers the question: *can we forsake process for progress*? Following close analysis of the SBTi and C40, this article contends that there is a minimum floor for process required to achieve measurable progress.

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384 At 90.

385 Climate Action "C40 Cities & Siemens to collaborate on sustainability" (19 April 2013) <www.climateaction.org>.

386 Gordon, above n 84, at 90.

387 Matthew Hoffmann *Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto* (Oxford University Press, Oxford, 2011) at 93.

388 Gordon, above n 84, at 90.

389 Shaffer and Bodansky, above n 8, at 35.

390 Gordon, above n 84, at 91.

391 Ron Kluvers and John Tippett "Mechanisms of Accountability in Local Government: An Exploratory Study" (2010) 5 Int J Bus Manag 46 at 48–49.

"Anything worth doing is worth doing badly",[392] is a well-worn cliché—but does this always hold true? Both the C40 and the SBTi appear to be achieving *something*. Is it better to have imperfect action than inaction? Arguably, enabling pursuit of "progress" without processes legitimising and verifying progress made could undermine the incentive of non-state actors to act meaningfully. Alternative transnational climate action could also reduce state incentives to act,[393] which is concerning if transnational climate action could be of poor quality. As well as eroding the power held by state actors,[394] there are concerns that action by transnational actors may allow and excuse state non-action.[395]

Despite these criticisms, this article contends that we are past the point of climate action perfectionism. Earth is truly in dire straits. Some think that the "groundswell" of TEL will compel action by states by increasing the pressure on negotiators.[396] It is important to note that it is unlikely that TEL will unilaterally solve climate change. Transnational law is not a replacement, but a "placeholder".[397] If transnational climate ambition raises global ambitions even slightly, then it has value. In the absence of dramatic action, we are headed for climate catastrophe. Part II established that traditional environmental law has largely failed to stimulate the action we need. TEL emerges in the gaps where traditional governance has failed.[398] When considering the process and progress trade-offs in transnational law, it must be noted that "all environmental governance tools … are highly imperfect".[399] TEL must be considered in the context of "two imperfect institutional alternatives": multilateralism is hardly a paragon of perfect process.[400] Despite procedural trade-offs, climate change "demand[s] procedural innovations".[401] Relying on multilateralism alone will result in climate action "too little too late" to prevent dangerous anthropogenic climate change.[402]

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392 This saying is said to originate from a quote by Gilbert Chesterton, that "if a thing is worth doing, it is worth doing badly": see Gilbert K Chesterton *What's Wrong With the World* (Dodd, Mead and Co, New York, 1910) at 320.

393 Streck (2020), above n 107, at 27.

394 Streck (2021), above n 55, at 501.

395 Streck (2020), above n 107, at 26.

396 Chan, Brandi and Bauer, above n 70, at 241.

397 Streck (2020), above n 107, at 28.

398 Dingwerth and Green, above n 130, at 156.

399 Shaffer and Bodansky, above n 8, at 38.

400 At 38.

401 At 38.

402 At 38.

Analysis of the SBTi and C40 has illustrated that *measurable progress requires some process.* As so often proclaimed by C40: "[i]f you can't measure it, you can't manage it, and you can't fix it".[403] When "done right", TEL can "provide an energy boost to the 'ossified' climate regime".[404] Conversely, when not done right, progress is untrustworthy. We need progress, and we are not in a position to be picky. However, there is a *minimum floor* for process—we need the process that allows us to measure and track progress to the extent that we know: (i) what actors intend to achieve; and (ii) what actors are achieving in measurable, quantifiable terms. Without this *minimum floor* for process, we forsake progress.

VIII CONCLUSION

> In our obscurity – in all this vastness – there is no hint that help will come from elsewhere to save us from ourselves. The Earth is the only world known so far to harbor life. There is nowhere else, at least in the near future, to which our species could migrate. Visit, yes. Settle, not yet. Like it or not, for the moment the Earth is where we make our stand.[405]
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> Carl Sagan *A Vision of the Human Future in Space: Pale Blue Dot* (1994)

Sea ice is melting, oceans are acidifying, extreme weather events are increasing in frequency and species extinction is causing a global biodiversity crisis. Climate change has already adversely affected Earth and its inhabitants. The situation only stands to worsen without massive reductions in global greenhouse gas emissions. States have dallied: the UNFCCC has not prompted collective action of the scale required and seems unlikely to do so. The world desperately needs progress in climate action, and TEL claims to be able to deliver this.

This article sought to answer whether, through TEL, we could forsake process in order to achieve progress. First, the article provided an evaluation of multilateralism's failure to drive effective progress through the UNFCCC regime. Second, the article defined TEL, and identified two pre-eminent examples of TEL—SBTi and C40—operating in the climate change space. Third, the article sought to illustrate the theoretical stance on the relationship between progress and process in TEL. Theory was distilled to the position that TEL's promise of progress is accompanied by process failings. This article then questioned whether we *could* forsake process, or whether trading-off process compromised progress. Fourth, this article investigated the relationship between progress and process in the context of evaluating SBTi and C40.

This article concludes that TEL *cannot* forsake process entirely to achieve progress. Irrespective of our desperate need for progress, there is a minimum floor for process required to drive effective

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403 Shultz, Gartner and Appleby, above n 334.

404 Streck (2021), above n 55, at 496.

405 Carl Sagan *A Vision of the Human Future in Space: Pale Blue Dot* (Random House, New York City, 1994) at 6.

progress. Both the SBTi and C40 had process failings that obscured measurable progress. Analysis of both the SBTi and C40 highlighted the relational nature of progress and process. Transparency and accountability are prerequisites for measurable progress. At the present time, the key agenda-setting role played by the SBTi is compromised by poor performance legibility and contentious credibility. C40 demonstrates the need for publication of the right information: both flattering and unflattering. It would be naïve to ignore the economic and aesthetic incentives for actors to engage with TEL. However, the usefulness of governance schemes is stunted where clear and comparable progress is not available, such that progress is difficult to track and actors cannot be held to account.

This research also showcases areas which require further investigation. Each limb of the framework used by this article to assess process and progress deserves a comprehensive investigation in its own right. Legal analysis of the SBTi and C40 is limited, so both positive and normative analysis would enable more discourse. Analysis of other transnational environmental schemes would also be fruitful: would findings made by this article in relation to the SBTi and C40 apply similarly to other transnational environmental legal schemes?

This article also raises a number of other questions. TEL is more than greenwashing, but it is indisputable that, as exhibited by the SBTi and C40, it faces a number of deficits. How can TEL address its shortcomings? Are its process failings inherent? Why are transnational governance schemes and TEL constructed as they are? What is the underpinning ideological justification of the formulation of these legal standards? More generally, this article established a framework for analysis in which progress and process are oppositional. Further research into this dualism would be illuminating. Must the absence of one negate the presence of the other?

TEL must not be discarded: these schemes exist and promise progress that would not otherwise be achieved. TEL has enormous creative potential. We ought to capitalise on the existence of these schemes: any climate action should be encouraged. However, scrutiny of TEL, and governance schemes, is direly needed. Scholarship is in a position to intervene. TEL and its producers ought to be spotlighted to motivate effective and credible processes. An intensified public gaze must assist transnational governance schemes in holding themselves to account.