

The strength of weakness: pseudo-clubs in the climate regime

Jessica F. Green

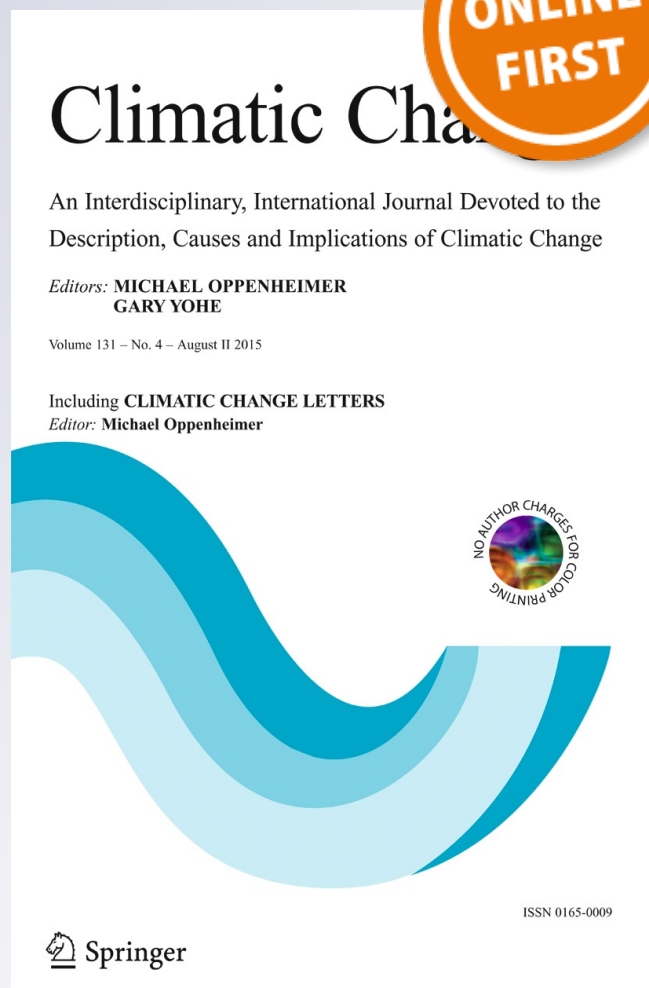
Climatic Change

An Interdisciplinary, International Journal Devoted to the Description, Causes and Implications of Climatic Change

ISSN 0165-0009

Climatic Change

DOI 10.1007/s10584-015-1481-4



Your article is protected by copyright and all rights are held exclusively by Springer Science +Business Media Dordrecht. This e-offprint is for personal use only and shall not be self-archived in electronic repositories. If you wish to self-archive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer's website. The link must be accompanied by the following text: "The final publication is available at link.springer.com".

The strength of weakness: pseudo-clubs in the climate regime

Jessica F. Green¹

Received: 26 February 2015 / Accepted: 9 August 2015
© Springer Science+Business Media Dordrecht 2015

Abstract The political utility of clubs hinges on their ability to provide excludable benefits to members. But in some cases of climate clubs, membership is not easily demarcated, and excludable benefits may be minimal. I argue that these governance initiatives—where membership is fluid and benefits are small—are more accurately defined as “pseudo-clubs.” Though they function differently than conventional clubs, “pseudo-clubs” can have considerable political utility. They can lay the foundations for emissions mitigation by solving technical problems associated with the measurement of GHGs. Moreover, since they have low entry costs and minimal sanctions, they can easily attract large numbers of users. With broad membership “pseudo-clubs” can help promote the uptake of standards, potentially solving coordination problems. However, since measurement is only a precursor to reduction, ultimately, incentives to measure will have to be coupled with rules to reduce emissions. Environmentally effective pseudo-clubs will eventually need the help of governments to shift from coordinating emissions *measurement* to cooperating on emissions *reduction*. Pseudo-clubs can serve as an initial building block toward meaningful climate action, but governments will have to finish the job.

1 Introduction

Since states have had great difficulty agreeing on an intergovernmental treaty on climate change, many have argued that it is more realistic to focus on agreements among small groups of actors with climate-related benefits. Earlier work by Stewart, Oppenheimer and Rudyk suggests that clubs, led by both government and industry, can serve as a building block upon which new strategies for climate cooperation can be constructed (Stewart et al. 2013). Similarly, Victor suggests that “climate accession deals” between enthusiastic states that wish

This article is part of a Special Issue on “Alternate Structures for Global Climate Action: Building Blocks Revisited” edited by Richard B. Stewart and Bryce Rudyk.

✉ Jessica F. Green
Jessica.green@nyu.edu

¹ Department of Environmental Studies, New York University, New York, NY, USA

to take the lead on climate change, and developing nations could tailor economic incentives for policy changes in the developing world (Victor 2010). Developing nations would set the goals of these “clubs”; financial incentives from climate leader nations would help realize them.

The political utility of clubs hinges on their ability to provide excludable benefits to members. But in some climate clubs, membership is not easily demarcated, and excludable benefits may be minimal. I argue that these governance initiatives are more accurately defined as “pseudo-clubs.” This paper argues for an expanded conceptualization of economic clubs to include pseudo-clubs. I compare conventional economic theories of clubs with voluntary environmental clubs and pseudo-clubs. I argue that pseudo-clubs have considerable political utility in serving as a building block for action on climate change. They can lay the foundations for emissions mitigation by solving technical and coordination problems associated with measurement of GHGs free from the political constraints often suffered by states. However, pseudo-clubs are not without risks and shortcomings. First, effective clubs may pre-empt more ambitious behavior, driving a race to the bottom rather than one to the top. Second, since measurement is only a precursor to reduction, ultimately, incentives to measure will have to be coupled with rules to reduce. Environmentally effective pseudo-clubs will eventually need the help of governments to shift from coordinating emissions measurement to cooperating on emissions reduction. Pseudo-clubs can serve as an initial building block toward meaningful climate action, but governments will have to finish the job. Nonetheless, despite the need for eventual government intervention, pseudo-clubs can be politically useful as a way to build capacity and support for future reduction efforts.

2 From clubs to pseudo-clubs

2.1 Economic clubs

Clubs can be understood as “consumption-ownership-membership” arrangements (Buchanan 1965, p. 1). Members of a club both own and consume the goods produced. This implies that the goods are non-rival—i.e. consumption by one actor does not preclude consumption by another. Moreover, since only members can consume the goods, there are benefits that accrue to members that non-members do not enjoy. Newspaper subscriptions, movie attendance and food cooperatives are all examples of club goods. My subscription to the newspaper does not preclude you from buying one, and those who do not subscribe cannot read the paper’s contents. These clubs are economic arrangements where actors choose to participate for the material benefits that membership confers.

A number of climate clubs have been suggested as a means to reduce GHG emissions. For example, in a technology club, members (which could be states, firms, NGOs or some combination thereof) pool their resources to develop an emissions-reducing technology such as developing alternative energy sources. Members must invest in technology development, but once operational, they would have exclusive access. These early investments put club members at a considerable economic advantage compared to non-members, since they would have access to cheaper forms of energy. This is clearly a club good: it is non-rival, and the benefits are excludable. Two members can consume the technology without interfering with each other’s use. Non-members do not have access.

Oppenheimer et al. suggest a government-based club to promote carbon capture and storage (CCS). Funding from developed country governments such as the US and the EU could help

defray the expenses of expanding the technology in India and China, which are heavily dependent on coal. In exchange, these nations would have access to developed country markets that non-members would not enjoy. Similarly, Nordhaus suggests a climate club that levies a “carbon duty” on non-participating countries. All imports from non-participating countries would be taxed at a uniform level, regardless of their carbon content (Nordhaus 2015, p. 1348–49). This would confer a favorable trade relationship among members, excluding non-members from the same benefit.

Other “voluntary” environmental clubs (VECs) employ a similar logic of restricting membership in exchange for excludable benefits. These can be thought of as a sub-set of traditional economic clubs. They operate on the same principle, but generally confer reputational, rather than economic benefits. And membership produces a *public*, rather than a private good. These voluntary clubs are, in essence, a type of regulation—a policy tool for creating public goods. Members of VECs produce public goods, such as reduced environmental pollution, in exchange for reputational benefits. They choose to join because they “enjoy the rewards of affiliating with the club’s brand reputation” (Prakash and Potoski 2006, p. 2). They may also join to receive tangible benefits such as access to technical knowledge (Hsueh and Prakash 2012).

What do these VECs do? They may specify standards for environmental management, create procedures for reducing pollution, or certify the environmental qualities of specific goods (see, e.g. (Cashore et al. 2004; Prakash and Potoski 2006; Green 2014). Thus, standards may establish what constitutes “organic” food or “sustainably-harvested” timber. Producers choose to adhere to these rules in exchange for a “seal of approval” from the standard-setters, and the accompanying reputational benefit of being an environmental leader. The ISO 14001 standard is one example of a voluntary environmental club. It is an environmental management system that members utilize to manage internal operations with respect to environmental impact. Because these standards require third-party auditing to verify compliance, the reputational benefit is restricted only to those who can show they are adhering to the rules (Prakash and Potoski 2006, p. 88–96).

2.2 Pseudo-clubs

Like traditional economic clubs and the related voluntary environmental clubs, pseudo-clubs also furnish non-rival public goods, often in the form of standards. However, in pseudo-clubs, membership is fluid, benefits are small and the excludability of benefits is debatable. Whereas economic and voluntary environmental clubs require some mechanism of enforcement, pseudo-clubs generally lack such a requirement. Without independent enforcement, any actor can proclaim itself to be an adopter, with little to no consequence for breaking the rules. Since the costs of both joining and noncompliance are low, the reputational benefits that accrue to “members” (or, perhaps, more accurately, “participants”) in pseudo-clubs are minimal at best.

By contrast, VECs distinguish leaders from laggards through compliance verification. This is as a credible mechanism for enforcing the rules. As requirements for compliance rise, so too do the reputational benefits of membership. As I discuss further below, most pseudo-clubs do *not* require third-party verification of compliance; without this requirement, benefits of membership are necessarily lower, since joining can be essentially costless.

Two examples of pseudo-clubs help to illustrate these distinctions. The Greenhouse Gas Protocol is a set of standards that help organizations measure their emissions.¹ The standards were created by two NGOs: the World Resources Institute and the World Business Council on Sustainable Development. The standards are not a rival good; one organization's use of them does not preclude another from doing the same. Since the standards are freely available on the Internet, they are clearly not excludable.

According to economic theory, the GHG Protocol standard is a *public* good, not a club good. It is non-rival and non-excludable. But what about the users of the standard? Are they members of a club, joined by their shared use of this voluntary standard, or are they simply individual do-gooders?

Adoption of the Protocol is not recognized by a third-party; there is no eco-label or other outward indication of membership. Thus, the benefit of "membership"—or more aptly, participation—is minimal. In implementing the standard, users might identify ways to reduce emissions and therefore reduce operating costs. Or, they could advertise their new practices (for example, in their annual report), perhaps gaining a small reputational advantage.

However, since there are no penalties for non-compliance, the use of the standard does not constitute an excludable benefit. Indeed, compliance is completely irrelevant, as there are no provisions for monitoring (though there is guidance on monitoring practices for those who wish to undertake it). Without monitoring or penalties for non-compliance, costs of participation are low, and therefore not a meaningful signal of intentions to change behavior.

A second example of a pseudo-club further illustrates the intricacies of characterizing clubs in climate governance. CDP (formerly the Carbon Disclosure Project) is an NGO that collects data on carbon emissions, energy use and climate risks and opportunities from thousands of the world's largest companies.² CDP scores participants both on the quality of the data they provide and on the "level of action taken on climate change."³ It requires that participants have their reports verified by a third party, but publishes data for those who do not. (Failure to verify simply results in lower scores.) CDP then compiles and disseminates this information, making it available to institutional investors who use the data to make investment decisions. However, much of the data is also freely available on its website.

CDP claims that using its reporting methodology offers several benefits, since it allows companies to demonstrate:

- Increased awareness of greenhouse gas emissions hot spots so that they can begin to reduce them.
- Business leadership in understanding the risks from climate change, deforestation and water scarcity.
- How they are creating opportunities to innovate and generate revenue from sustainable products and services.
- How they are future-proofing their business from climate change and water impacts.⁴

¹ Since creating this initial "corporate" standard in 2001, the GHG Protocol has issued a number of different standards, all with slightly different targets. See Green 2010, 2014.

² <https://www.cdp.net/en-US/Programmes/Pages/climate-change-programs.aspx>.

³ See CDP 2013 Scoring Methodology. Available at <https://www.cdproject.net/Documents/Guidance/CDP-2013-Scoring-Methodology.pdf>

⁴ These benefits are excerpted directly from <http://www.cdproject.net/en-US/Respond/Pages/companies.aspx#whyreport>.

Like the GHG Protocol, reporting is completely voluntary, and there is no penalty for non-compliance.

If we conceptualize the climate regime broadly—including sub-national and transnational efforts (see, e.g. Andonova et al. 2009; Hoffmann 2011; Abbott 2012; Green 2013; Hale and Roger 2014)—then there are a broad range of active pseudo-clubs. There are a variety of private standards to measure greenhouse gas emissions at the corporate, city and sub-national levels. This includes the aforementioned GHG Protocol, which now has seven active standards (Green 2015). ICLEI, a transnational NGO promoting city-level sustainability, has produced similar measurement tools and software. C40 Cities, a global network of cities active on climate change, is also developing a measurement standard for cities.⁵ The Covenant of Mayors, another city-level pseudo-club among EU countries, utilizes a different set of standards for emissions measurement and baseline creation.⁶

There are also a number of climate “registries”, which do not necessarily create measurement standards, but collect, collate and disseminate data from reporting entities. The CDP is one such example.⁷ In the US, the Climate Registry performs a similar function for North American states, provinces, territories and first nations.⁸ The Carbonn Cities’ Climate Registry helps local governments “achieve transparency and accountability of local climate actions, demonstrate leadership and initiate a process for direct access to global climate funds.”⁹ These can also be considered pseudo-clubs: participants use agreed-upon standards to collect and report data, but there are few efforts to monitor behavior, much less apply sanctions.

Verifying compliance is the first step in enforcing the rules. Yet, few pseudo-clubs, such as ISO-14064 or the Climate Registry, have requirements for third-party verification. Moreover, none has a penalty for failure to comply with the procedures set forth in the standard. The most onerous “sanction” is being unable to publicly state one’s participation in the program.

This discussion suggests that there are climate governance initiatives that exhibit some features of a traditional club, but do not fall neatly within the definition.

In sum, pseudo-clubs *appear* to be clubs, but do not quite conform to the standard definition. Pseudo-clubs may or may not have paying members like traditional clubs, and the benefits of membership may be quite small. Table 1 illustrates the differences between the three types of clubs discussed above.

Finally, it should be noted that pseudo-clubs are distinct from more general institutionalized forms of cooperation. Cooperation in the climate change regime is pervasive, but these activities are not always premised upon individual benefits, as is the case with clubs and pseudo-clubs. Hoffmann’s work on climate experiments documents “experimental attempts at governance” that seek to address various facets of the climate problem through innovation and trial and error (2011, p. 17). These institutionalized forms of cooperation include groups whose primary activities entail networking or implementation, which clearly fall outside the realm of pseudo clubs. For example, Edenbee is a “decentralized mutual support group” for individuals that seek to reduce their carbon footprint (2011, p. 45). The goal of the group is to “build a community of like-minded individuals” (ibid). The Network of Regional Governments for Sustainable Development is also focused on sharing information and experiences among regional governments across borders (ibid). In both of these governance experiments, actors

⁵ <http://www.c40.org/>

⁶ <http://www.covenantofmayors.eu>

⁷ <http://www.cdproject.net>

⁸ www.theclimateregistry.org.

⁹ <http://citiesclimateregistry.org/about/mission/>

Table 1 A typology of clubs

	Traditional economic clubs	Voluntary environmental clubs	Pseudo-clubs
Type of good produced	Private	Public	Public
Benefits to membership	High	Medium	Low
Enforcement mechanisms	Yes	Yes	Rarely; if so, often minimal

are cooperating to share information, but do so without the explicit quid pro quo of membership benefits.

Another class of experiments focuses on voluntary action. These are “doers” who undertake various projects around climate change. The well-known C40 Initiative describes itself as “a network of the world’s megacities taking action to reduce greenhouse gas emissions.” These actions cover a broad range of issues from implementing sustainable transportation systems to improving energy efficiency of municipal buildings.¹⁰ Each city chooses its own priorities and activities voluntarily. Affiliation with the network is simply a way to collect and exchange information.¹¹

3 The political utility of pseudo-clubs

The distinction between clubs and pseudo-clubs is more than a semantic one. Although they do not function like traditional economic clubs, they can potentially serve important political purposes, which are useful to consider in the context of a “building blocks” approach to climate change. First, weak or non-existent sanctions can attract participants, and build momentum toward more participation, whereas the more onerous sanctions of economic clubs may deter potential members. Second, “weak ties” among users—casual relationships with little substance or commitment—can facilitate the diffusion of practices, which can then be slotted into binding regulations. Pseudo-clubs can help solve coordination problems about which standards to use, potentially providing an uncontroversial basis for binding public rules. To use Sabel and Victor’s terminology, they provide an arena for problem-solving under conditions of “thin consensus.” In this section, I first describe the process through which pseudo-clubs can facilitate political consensus. I then turn to the potential pitfalls of such an approach.

3.1 Attracting members with low costs

Pseudo clubs have an important advantage over their more traditional counterparts: membership is cheap, and therefore more attractive to potential joiners. Thus, one strength of pseudo-clubs is getting people to the table—attracting a broader pool of participants than would be possible with more stringent membership requirements. Given the challenges of overcoming free-rider problems, this is a significant political benefit.

¹⁰ See <http://www.c40.org/networks>

¹¹ As noted above, C40 is in the process of developing a standard for measuring and reporting city-level emissions. This component of the institution could be considered a pseudo club according to the definition set forth above.

In traditional economic clubs, membership benefits hinges on the use of some sanction—or at least, the withholding of an incentive—to create excludable benefits. However, sanctions are two-sided. While they help provide benefits, in some cases, the threat of sanctions might deter membership. Thus, firms that know they will not meet the requirements of membership may choose not to join, especially if they will face significant sanctions. As Victor notes, the key task in his proposed climate accession deals is to “entice a new member into the club (and thus create broader benefits for the club) while not over-paying (or under-charging) the new member” (2010, 634). In other words, clubs constantly face the challenge of striking the right balance between providing a “meaningful” benefit to potential members, which requires some degree of exclusivity, and avoiding overly onerous sanctions which would discourage joining in the first place.

Because of their minimal benefits and fluid membership, pseudo-clubs are not likely to discourage members from “joining.” As a result, they can be attractive even to reluctant parties. In other words, pseudo-clubs are a form of shallow cooperation, where there are relatively small benefits to cooperation, but correspondingly low costs (Downs et al. 1996). They are low risk, low reward governance strategies.

3.2 Expanding membership through weak ties

In his seminal work, “The Strength of Weak Ties”, Mark Granovetter argues that weak ties between actors are productive in an unanticipated way: they can extend the reach of a network. Weak ties connect actors with few overlapping connections—casual acquaintances with whom one has limited interaction and shares few common relationships. Strong ties, by contrast, are characterized by a shared social identity, such as close friends, members of a family, or of a religious community.

Counterintuitively, weak ties can be more important in spreading information than close friends or family, because they “more likely to link *different* small groups than are strong ones, which tend to be concentrated within particular groups” (Granovetter 1973, 1376, emphasis original). This is so because weak ties can yield access to a whole new set of actors. For example, they can expand the pool of potential employers or spouses: people often find jobs or partners through friends, or friends of friends. Granovetter notes that “[t]he weak tie between Ego and his acquaintance...becomes not merely a trivial acquaintance tie but rather a *crucial bridge* between two densely knit clumps of close friends.” (Granovetter 1983, 202). Without these acquaintances, i.e. weak ties, these groups would not be connected.

Pseudo-clubs are populated by members with weak ties: there is often little overlap in the ties among members. Moreover, because participation is voluntary, sanctions are virtually non-existent and benefits are small, few participants would consider themselves as having a joint identity.¹² For example, there are now over 5000 organizations that report to the CDP.¹³ They include a broad array of corporations, institutional investors, sub-national governments, among others. The diversity of these organizations suggests that they are not driven by a shared sense of identity or obligation, but rather, some other motivation. This is consistent with Granovetter’s definition of weak ties.

Weak ties among participants in a pseudo-club can actually be an advantage. Weak ties provide access to a broad set of actors that would not necessarily be available in a network

¹² Granovetter himself notes that the strength of ties is generally recognizable on an “intuitive basis” (p. 1361).

¹³ <https://www.cdp.net/en-US/Results/Pages/overview.aspx>

characterized by strong ties. In a word, they “provide people with access to information and resources beyond those available in their own social circle” (Granovetter 1983, 209). They serve as a mechanism for disseminating information or practices around emissions measurement more broadly than would otherwise be possible.

3.3 Network effects

If measured by the breadth of rule adoption, a number of pseudo-clubs have enjoyed considerable success. The Greenhouse Gas Protocol has become the gold standard in measuring firm-level emissions. It serves as the basis for virtually every other standard with the same goal, including the ISO-14064-1 standard (Green 2010; Green 2014, chap. 5). It now also includes standards for firms that wish to measure the carbon footprint of a specific product, and the emissions generated along the supply chain for the entire organization (Green 2015). Similarly, the CDP notes that 81 % of the world’s Global 500 companies now report on their emissions and climate readiness activities under the auspices of this pseudo-club.¹⁴

A critic would dismiss these pseudo-clubs as little more than greenwashing—opportunities for firms and others to claim that they are doing something without making meaningful behavioral changes (i.e. reductions). Indeed, many have questioned whether voluntary environmental clubs, which have more stringent compliance mechanisms than pseudo-clubs, contribute to improvements in environmental quality (King and Lenox 2000). Indeed, with limited verification, it is difficult to ascertain a) whether members of climate pseudo-clubs are complying with rules and standards, and b) if so, whether this reduces emissions beyond business as usual.¹⁵

Yet even if pseudo-clubs do *not* contribute to emissions reductions, they can still be *politically* productive, serving as a means to broader and deeper cooperation on climate change. Weak ties, coupled with cheap entry costs and minimal sanctions can attract large numbers of users. This is a useful first step toward reductions.

In turn, this growing number of users produces network effects. Network effects enhance the benefits produced by the pseudo-club. As more people adopt the rules, they become more useful. An oft-cited example is the telephone. If only one person has a telephone, it is of no value to the owner. As more people have them, the utility of having a telephone increases, since each owner can reach more people. The same is true of the standards promulgated by pseudo-clubs. If everyone measures and reports their emissions in the same way, these shared practices can smooth the path toward greater action. A dominant standard in turn lowers the political costs of governments moving to a regulatory system, since many of the tools are already in place.

Such a process is not merely possible, it is already happening. Governments at the national and subnational levels are adopting rules created by clubs and pseudo-clubs. They are choosing to recognize or adopt rules created by leaders in the field—the GHG Protocol in particular.¹⁶ This pseudo-club provides much-needed infrastructure for the implementation of mitigation policies. Harmonization across measurement standards can transform the nature of the collective action problem by diminishing the level of adjustment costs or changing the

¹⁴ <https://www.cdp.net/CDPResults/CDP-Global-500-Climate-Change-Report-2013.pdf>.

¹⁵ Lenox and Nash 2003 find that voluntary environmental clubs exhibit qualities of adverse selection, where the worst polluters are more likely to join clubs with weak rules – a clear form of greenwashing.

¹⁶ Similar patterns of adoption are also occurring with actual clubs, such as voluntary offset standards. This demonstrates an additional route through which clubs might be an effective approach to GHG reduction—by paving the way for government action.

nature of the choices they face. These private rules are providing the infrastructure for broader mitigation efforts.

There are other examples of this phenomenon in the area of GHG measurement. A 2009 US Executive Order 13,514 required federal agencies to report their emissions; the reporting protocol is based on the GHG Protocol. The order further requires federal agencies to set a reduction target for 2020, relative to a 2008 baseline. Here, the GHG Protocol has successfully addressed the challenge of coordination by using an already agreed-upon standard. The US federal government has now supplied to regulation to promote collective action on mitigation.

Similarly, localities in over twenty states in the US have created GHG inventories, many of which are accompanied by reduction targets.¹⁷ Most cities and localities use the aforementioned ICLEI standard to create these inventories. This is another example of a pseudo-club providing the technical infrastructure combined with governmental regulation to supply the incentives for actual reductions.

In addition, the UK recently enacted legislation requires all companies listed on the UK stock exchange to report their greenhouse gas emissions. The basis for their measurement rules is also the GHG Protocol.¹⁸ The UK has also enacted a plan to reduce their emissions by 80 % below 1990 levels by 2050. Reporting is not currently explicitly linked to allowances under the EU Emissions Trading Scheme, but it is part of the UK's larger mitigation plan.¹⁹ Although the reporting requirements are not directly linked to the reduction targets, they will again provide a measurement baseline should the UK government decide to implement additional mitigation policies.

At the international level, at least eight nations now have mandatory emissions reporting requirements; four of them appear to be based on the GHG Protocol (Kaufmann et al. 2012). This finding demonstrates that the uptake of pseudo-club standards rules is crossing the threshold from public to private, and could therefore be a key building block in the implementation of mitigation targets.

In this sense, the low-risk, low-reward strategy of pseudo-clubs is a benefit, since it *initially* shifts the focus from a cooperation game (reducing emissions) to a coordination game (using the same standards). This can attract users rather than scare them away with onerous sanctions. Moreover, broad uptake of the same standards builds critical infrastructure for future regulation. If actors are already using the same metrics, there is less likelihood of contestation over rules, since switching costs will be limited. Government regulation, and the penalties it can impose, can then switch the nature of the collective action problem back to a cooperation game.

4 The effectiveness of pseudo-clubs: from measurement to reduction?

Of course, without incentives to reduce, these pseudo-clubs may produce nothing more than shallow cooperation. The result could simply be a large network of users who agree to measure their emissions the same way, but do little to mitigate them.

¹⁷ <http://epa.gov/statelocalclimate/state/state-examples/ghg-inventory.html>.

¹⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206392/pb13944-env-reporting-guidance.pdf

¹⁹ See <https://www.gov.uk/government/policies/reducing-the-uk-s-greenhouse-gas-emissions-by-80-by-2050>.

In a word, pseudo-clubs do not automatically produce positive climate outcomes and could have deleterious effects. Industry-based groups have been known to self-regulate through clubs or pseudo-clubs as a way to pre-empt more stringent regulation. Some have argued that these approaches promote continued economic production, which is fundamentally incommensurate with environmental protection (Maniates 2001; Dauvergne and Lister 2012). Finally, pseudo-clubs could promote a race to the bottom, whereby firms exploit variation in rule stringency moving their operations to places where rules are the most lax (Vogel 1997).

These risks indicate that we must consider the conditions under which pseudo-clubs can parlay voluntary activities into real emissions reductions. If they are to be successful building blocks, pseudo-clubs must move from measurement to mitigation. To make this transition, governments will likely be needed.

I suggest three sets of linked conditions that can promote eventual reductions. First, regulatory uncertainty and/or the threat of future regulation can prompt the formation of pseudo-clubs. Second, pseudo-clubs can be diffused through network effects that eventually produce a dominant actor. Third, governments can transform pseudo-clubs through regulation.

The threat of regulation can be a useful tool both for the formation and expansion of pseudo-clubs, through the promise of early-mover benefits (Green 2010). In the early 2000s, many early business leaders on climate change took action because of the imminent entry into force of the Kyoto Protocol. In these cases, leadership arose, at least in part, out of self-interest. Early movers believed that they would be better prepared to reduce emissions once restrictions were put in place, and thus, would have an advantage over their less prepared competitors.

Second, harmonization among pseudo-clubs can reduce fragmentation and promote a coherent set of behaviors, standards or practices among actors. The process of harmonization can occur through several mechanisms. Material incentives can encourage some actors to incur the costs of harmonization in order to achieve long-term gains (Simmons 2001; Mattli and Buthe 2003). Social interactions among actors can encourage learning or diffuse practices in a way that promotes harmonization (Ruggie 2002; Bernstein and Cashore 2007). Finally, political preferences among actors can also drive convergence. Hence, Vogel speaks of the “California effect”, whereby politically progressive Californians demand high standards in their state, which in turn drive upward harmonization across the country (Vogel 1997), as manufacturers standardize practices to meet the most stringent standards.

Third, harmonization among pseudo-clubs can potentially lower the political costs of regulation. Harmonization usually entails “switching costs” for those who using rules that are not used. However, if there is already some degree of harmonization among measurement and reporting practices, then governments are not compelled to “pick winners” among equal competitors and therefore create switching costs. Rather, if one or two pseudo-clubs demonstrate dominance, the choice for public authorities becomes easier. This harmonization facilitates the “ratcheting up” of voluntary practices through the power exercised by public authorities (Cashore et al. 2007). Moreover, public regulation requiring mitigation seems more likely once the tools for such a policy are in place.

The eventual need for governments does not obviate the value of pseudo-clubs. Given the political challenges of overcoming the free-rider problem and getting actors to contribute to the creation of public goods, low-cost strategies are needed. They can attract otherwise reluctant actors; in turn, this can lower political resistance that governments may encounter. Pseudo-clubs can thus provide a less politically-charged environment in which to begin the regulatory process.

5 Conclusion: pseudo-clubs and governments

Others in this special issue have addressed the role of clubs as a building block for broader action on climate change. I have suggested that if we are going to leverage the strength of the multitude of transnational governance initiatives on climate change, we must also consider the role of pseudo-clubs, where excludability is minimal to non-existent. The strength of pseudo-clubs lies in their weakness. Costs of “joining” are low, since there are few, if any, sanctions (Potoski and Prakash 2005). This can help attract users, even reluctant ones, to “join” and adopt the rules. As the number of users expands, so do the benefits, potentially creating a positive feedback loop encouraging even more actors to join. They can provide an important first step for regulatory action.

Pseudo-clubs can promulgate rules and even promote their broad adoption. They can help lay the foundations by solving technical and coordination problems associated with measurement. But they cannot provide the sanctions that will be needed for meaningful reductions. Ultimately, incentives to measure will have to be coupled with rules to reduce. Pseudo-clubs can help pave the way, but governments will have to finish the job.

References

- Abbott KW (2012) The transnational regime complex for climate change. *Environ Plan C Gov Policy* 30:571–590
- Andonova LB, Betsill MM, Bulkeley H (2009) Transnational climate governance. *Glob Environ Polit* 9:52–73. doi:10.1162/glep.2009.9.2.52
- Bernstein S, Cashore B (2007) Can non-state global governance be legitimate? An analytical framework. *Regul Gov* 1:347–371
- Buchanan JM (1965) An economic theory of clubs. *Economica* 32:1–14. doi:10.2307/2552442
- Cashore B, Auld G, Newsom D (2004) Governing through markets: forest certification and the emergence of Non-state authority. Yale University Press, New Haven
- Cashore B, Auld G, Bernstein S, McDermott C (2007) Can Non-state governance “ratchet up” global environmental standards? Lessons from the forest sector. *Rev Eur Community Int Environ Law* 16:158–172. doi:10.1111/j.1467-9388.2007.00560.x
- Dauvergne P, Lister J (2012) Big brand sustainability: governance prospects and environmental limits. *Glob Environ Change* 22:36–45. doi:10.1016/j.gloenvcha.2011.10.007
- Downs GW, Roche DM, Barsoom PN (1996) Is the good news about compliance good news about Cooperation? *Int Organ* 50:379–406
- Granovetter MS (1973) The strength of weak ties. *Am J Sociol* 1360–1380.
- Granovetter M (1983) The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory* 1:201–233.
- Green JF (2010) Private standards in the climate regime: the greenhouse gas protocol.
- Green JF (2013) Order out of chaos: public and private rules for managing carbon. *Glob Environ Polit* 13:1–25. doi:10.1162/GLEP_a_00164
- Green JF (2014) Rethinking private authority: agents and entrepreneurs in global environmental governance. Princeton University Press, Princeton
- Green JF (2015) Global administrative law and the greenhouse gas protocol: the politics of standard-setting. Unpublished paper.
- Hale T, Roger C (2014) Orchestration and transnational climate governance. *Rev Int Organ* 9:59–82. doi:10.1007/s11558-013-9174-0
- Hoffmann MJ (2011) Climate governance at the crossroads. Oxford University Press, Oxford
- Hsueh L, Prakash A (2012) Incentivizing self-regulation: federal vs. state-level voluntary programs in US climate change policies. *Regul Gov* 6:445–473. doi:10.1111/j.1748-5991.2012.01140.x
- Kauffman C, Less C and Teichman D (2012) Corporate Greenhouse Gas Emission Reporting: A Stocktaking of Government Schemes. Paris: OECD. Available at <http://www.oecd.org/investment/internationalinvestmentagreements/50549983.pdf>. Accessed February 26 2015

- King A, Lenox MJ (2000) Industry self-regulation without sanctions: the chemical industry's responsible care program. *Acad Manag J* 43:698–716
- Lenox MJ, Nash J (2003) Industry self-regulation and adverse selection: a comparison across four trade association programs. *Bus Strateg Environ* 12:343–356. doi:[10.1002/bse.380](https://doi.org/10.1002/bse.380)
- Maniates MF (2001) Individualization: plant a tree, buy a bike, save the world? *Glob Environ Polit* 1:31–52. doi:[10.1162/152638001316881395](https://doi.org/10.1162/152638001316881395)
- Mattli W, Buthe T (2003) Setting international standards: technological rationality or primacy of power. *World Polit* 56:1–42
- Nordhaus W (2015) Climate clubs: overcoming free-riding in international climate policy. *Am Econ Rev* 105:1339–1370. doi:[10.1257/aer.15000001](https://doi.org/10.1257/aer.15000001)
- Potoski M, Prakash A (2005) Covenants with weak swords: ISO 14001 and facilities' environmental performance. *J Policy Anal Manage* 24:745–769. doi:[10.1002/pam.20136](https://doi.org/10.1002/pam.20136)
- Prakash A, Potoski M (2006) *The voluntary environmentalists: green clubs, ISO 14001, and voluntary environmental regulations*. Cambridge University Press, Cambridge
- Ruggie JG (2002) The theory and practice of learning networks: corporate social responsibility and the global compact. *J Corp Citizsh* 5:27–36
- Simmons BA (2001) The international politics of harmonization: the case of capital market regulation. *Int Organ* 55:589–620
- Stewart RB, Oppenheimer M, Rudyk B (2013) A new strategy for global climate protection. *Clim Chang* 120:1–12. doi:[10.1007/s10584-013-0790-8](https://doi.org/10.1007/s10584-013-0790-8)
- Victor DG (2010) Climate accession deals: new strategies for taming growth of greenhouse gases in developing countries. In: Aldy JE, Stavins RN (eds) *Post-Kyoto international climate policy*. Cambridge University Press, Cambridge, pp. 618–648
- Vogel D (1997) *Trading up: consumer and environmental regulation in a global economy*. Harvard University Press