15 A building blocks strategy for global climate change

Richard B. Stewart, Michael Oppenheimer and Bryce Rudyk
New York University; Princeton University; New York University

The likely future global climate regime, based on nationally determined, non-legally binding commitments, is not by itself likely to produce emissions reductions sufficient to prevent dangerous climate change. There is, however, already significant mitigation occurring outside the context of the UNFCCC that could potentially be scaled up to fill the gap. This chapter, expanding on earlier work, proposes a building block strategy that focuses on incubating and scaling up multilateral and multi-stakeholder initiatives in discrete sectors with mitigation potential. It outlines three paradigms – clubs, linkage and dominant actor – that provide a conceptual and institutional framework for mobilising non-climate interests of actors in order to generate associated climate benefits. Finally, it suggests that recent institutional developments in the UNFCCC could be used as a platform to launch and enhance these non-UNFCCC initiatives, compatible with the emerging UNFCCC strategy.

Introduction

Current UNFCCC negotiations signal a future global regime for climate action based primarily on voluntary (and likely not legally binding) commitments by individual countries. As this country-driven strategy cannot *by itself* ensure that individual country undertakings will in the aggregate achieve sufficient reductions to prevent dangerous climate change, complementary transnational strategies must be developed to fill the gap.

The building block strategy outlined in this chapter focuses on multilateral and multi-stakeholder initiatives around specific sectors of opportunity with high mitigation

potential (Stewart et al. 2013a,b). These initiatives will enlist the enterprise and resources of public and private actors, including firms and NGOs, international organisations, and subnational jurisdictions, as well as states. The strategy relies on three distinct institutional paradigms – clubs, institutional linkages, and dominant market actors – to build such initiatives.

Recognising the highly uneven support among various public and private actors for climate mitigation, the building blocks strategy seeks to capitalise on an array of other incentives to initiate actions that will reduce emissions. These incentives include profits for businesses, enhanced economic development and energy security for developing and other countries, mission advancement for development funders, and avoiding competitive disadvantage (as a result of leakage) for firms in jurisdictions that have adopted mitigation regulations. Here we propose institutional structures to mobilise such incentives. In some cases, these initiatives could be supported by governmental or other actors committed to climate mitigation for its own sake, including specifically the UNFCCC.

The building block strategy avoids the problem of reaching agreement across a large group of countries as well as the risk entailed in national commitments to deep, economy-wide emission reductions. The strategy would produce multiple climate dividends: immediate emissions reduction through the deployment of the individual building block initiatives; significant learning about the costs of mitigation action and the characteristics of durable initiatives (Sabel et al. 2015), leading to more, and more effective, initiatives; and increased trust through demonstrating action and creating institutions that regularise interactions between public and private actors, which may lead to greater long-term ambition.

The building blocks strategy

In order to enhance existing action, foster new action, and complement the UNFCCC, the building blocks strategy embraces a variety of special-purpose initiatives in specific sectors that would:

1. Enlist a limited number of public and/or private actors;

2. Focus on sectors and opportunities with high mitigation potential;
3. Tap actor incentives other than a desire to promote climate mitigation;
4. Not necessarily be legally binding; and
5. Not necessarily be formally linked to the UNFCCC.

Smaller-scale initiatives avoid the problems involved in negotiating and implementing a comprehensive global treaty (Downs et al. 1998). It is often easier to reach agreement among a smaller number of participants both on substantive goals as well as critically important procedural issues like monitoring and other arrangements to ensure compliance (Barrett 2003). Mobilising a suite of specific, incremental undertakings also reduces the cost of initiative failure and permits institutional and policy experimentation and learning (Sabel et al. 2015).

The uneven support for mitigation across states and governments has stymied global agreement; intense support in some jurisdictions does not compensate for indifference or opposition in others. The building block strategy adapts to this situation by mobilising material incentives such as economic gains, increased adaptation capacity and health, economic development, energy security, and other benefits. At the same time, the strategy recognises that many actors – both public and private – are motivated at least in part by climate protection. It draws on these pockets of support, including in governments that are unwilling to commit to economy-wide emissions caps but are prepared to participate in more limited undertakings to reduce emissions.

To make broad progress on emission reductions, it is critical to engage directly the actors beyond national governments, including sub-national jurisdictions, firms, NGOs, and international regulatory bodies with missions other than climate, such as the Montreal Protocol, the International Civil Aviation Authority (ICAO), the International Maritime Organization, and the multilateral and regional development banks. These actors are not and cannot be parties to the UNFCCC and many are effectively fenced out of its deliberations and programmes. As much of the climate emissions, and therefore the resulting climate mitigation action, occur as a result of decisions by these actors, their participation is necessary (Heede 2013).

The building block strategy provides a clear path forward to both avoid a plethora of disaggregated and disparate initiatives, and incentivise those initiatives that produce

positive climate co-benefits. It does this in two ways. First, we detail the club, linkage and dominant actor paradigms. These provide a systemic framework for a) analysing potential institutional and initiative opportunities, and b) identifying the incentives and actors that would be required to mobilise each initiative. The three paradigms involve somewhat different incentive structures and institutional logics, but each depends on opportunities to align non-climate incentives with activities that reduce emissions. Careful design is needed to target incentives that will tap actors' non-climate motivations and also produce positive climate outcomes. Second, we outline the essential role of institutional entrepreneurs and the prospect of building on elements of the UNFCCC (particularly the collaborative pre-2020 mitigation action process under Workstream 2) to more effectively and efficiently discover and implement building blocks initiatives.

Clubs

Recently, there has been much discussion of climate clubs to achieve emission reductions (Weischer et al 2012, Green et al. 2015, Nordhaus 2015, Victor 2015). The building block strategy focuses on incentivising clubs that produce a tangible 'club' good (e.g. new technology, pooled finance, pooled risk or common standards) that confers economic or other non-climate benefits such as reduced energy costs, energy security, or profitable R&D innovations. In order to prevent freeriding, these benefits are limited to members of the club who abide by its rules, which ensure that the club activities reduce emissions as well as provide benefits to members (Buchanan 1965). The incentives for participation, however, need not be uniform for all members (Hannam et al. 2015). Businesses or some developing countries may join a club in order to receive economic benefits limited to members, while other states and subnational jurisdictions may join and support the club activities in order to advance the global public good of climate protection that reduces emissions.

We see clubs being formed by industry, governmental authorities at different levels, NGOs, and international organisations, often in combination. Actual and potential examples include:

1. **Industry or industry-government clubs for research, development and deployment**. An example is the International Smart Grid Action Network (an arm

of the International Energy Agency), which aims to develop and deploy renewable transmission and smart grids across national borders.

2. **Green trade liberalisation clubs**. A group of countries is negotiating a general agreement on liberalised trade in green goods (Keohane et al. 2015).
3. **Standard-setting clubs**. Public-private expert bodies could form to harmonise technical standards to reduce transaction costs and increase the spread of technologies.
4. **Transnational supply chain regulatory clubs**. Following the example of the Forest Stewardship Council and its certification system and mark for sustainable timber, industry and NGOs could jointly develop performance standards and private certifying arrangements to leverage consumer demand for low GHG goods and services (Vandenbergh 2007).

Linkage

The linkage strategy leverages existing transnational organisations with missions other than climate protection through initiatives – undertaken by policy entrepreneurs within and outside of institutions – that further the organisation's basic mission while also achieving emission reductions. Strategic pockets of support within these organisations, along with flexibility in organisational mandates, may enable these policy entrepreneurs. This strategy economises by using existing organisations where entirely new institutions or programmes with explicit climate objects could not proceed. Like all building block strategies, each linkage initiative will be targeted to the interests of particular actors (in this case, those engaged in the existing organisation) and structured to produce net climate benefits.

Examples include:

1. **Extending the scope of existing environmental agreements to reduce emissions**. Discussions are already underway to extend the scope of the Montreal Protocol to include currently unregulated ozone-depleting substances (ODS) or ODS substitutes that are also GHGs.

2. **Adding an emissions reduction component to an existing non-environmental multilateral agreement**. For example, the ASEAN Agreement on Transboundary Haze capitalised on the ongoing relationships between the ASEAN countries to produce an environmental benefit. A similar strategy could be used to mobilise actions aimed at reducing emissions as a co-benefit.
3. **Preference of low-emission technologies in bilateral and multilateral development programmes**. A number of countries have prohibited their official development assistance from being used, except in very limited circumstances, to fund coal power generation.

Dominant market actors

The third strategy leverages the power of governmental regulators or firms with a dominant position in specific global or regional market sectors. Their dominant position enables them to promote GHG regulation throughout the sector in order to advance their interests. A regulatory jurisdiction with a major market share in goods or transportation services may thus be able to induce economic actors outside the jurisdiction to follow its rules in order to access its market or maintain scale economies in production. Relating to this phenomenon, there has been analysis of the 'California effect' (regarding Californian motor vehicle emission standards) and the 'Brussels effect' (regarding EU product regulations) (Bradford 2013). Regulating jurisdictions may actively pursue this strategy in order to protect their firms from competitive disadvantage. Dominant firms in industry may gain economic and strategic benefits by acting as first movers to adopt regulatory standards. Other firms can be induced through market pressures and network effects to follow the standards, which can be designed to enhance the dominant firm's position. The dominant firm may cooperate with government regulators to secure their adoption of the standards.

This strategy can advance climate protection when regulatory programmes that reduce GHG align with the incentives of dominant government or private market actors. Where dominant public or private actors enjoy sufficient economic, strategic, or other gains from acting as first movers with regulatory or market standards, they may act unilaterally with the goal of inducing others in a sector to follow suit. In some cases,

dominant public and private actors may effectively collaborate by using the regulatory power of the public actors to propagate a standard that was set.

Examples of this strategy include:

1. **Product or performance standards.** A dominant firm or group of firms in a climate-beneficial technology, such as components for wind turbines or grid technologies, may adopt or promote government adoption of regulatory standards that will give it competitive advantage.
2. **Market entry condition.** The extension of the EU's Emissions Trading System for regulating domestic emissions to international airlines serving Europe has already been proposed, and spurred action at ICAO. A group of major maritime port jurisdictions could impose enhanced fuel efficiency standards as a condition for using the port.

Launching initiatives and linking the building blocks strategy to the UNFCCC

As illustrated above, we already see significant action based on each of the three building blocks strategies. But the existing initiatives have not appeared spontaneously. They have required both that the incentives of the actors are aligned, and also that one or more entrepreneurs ferret out opportunities for action, identify and convene appropriate actors, structure the parameters of the initiative including institutional/legal arrangements, and ultimately launch the initiative. The existing building blocks have been sparked by all manner of initiative entrepreneurs: oil firms in the Canadian Oil Sands Innovation Alliance (a technology sharing club); the International Renewable Energy Agency (IRENA) in the development of initiatives on renewables in Africa and the small islands; and even the United Nations Secretary-General's Climate Change Support Team in the development of multiple initiatives at the 2014 Climate Summit.

The uptake of opportunities by policy entrepreneurs within the initiatives can be enhanced by providing assistance in accessing information on opportunities in areas of high mitigation potential, locating potential actors, structuring initiatives, accessing technical and financial resources, and by providing a platform to gain visibility. The

UNFCCC itself has significant resources for such assistance: technical knowledge (e.g. on project implementation and monitoring through the Clean Development Mechanism and capacity-building know-how through the Durban Forum on Capacity Building); access to potential sources of finance (e.g. the Green Climate Fund, the Global Environment Facility and the Adaptation Fund); as well as the political participation of 196 countries and significant convening power to bring in non-state actors. Of particular interest as global support for building block initiatives are the institutions that are developing under the Workstream 2 pre-2020 mitigation ambition mandate – the Technical Expert Meetings (TEMs), high-level events, and the Non-state Actor Zone for Climate Action (NAZCA) portal.

Technical information: The TEMs. The TEMs have become a hub of discussion among state and non-state experts on mitigation opportunities as well as the co-benefits of action and the barriers to overcome them, and, where known, the strategies and resources needed. They not only provide an opportunity for initiative entrepreneurs to engage directly with experts, but also provide informational outputs (e.g. technical papers and an online menu of policy options) for continued learning.

Political and financial engagement: The annual high-level event on increased pre-2020 action. These new high-level events focusing on specific initiatives in areas of high mitigation potential are now held alongside the annual Conference of the Parties (COP); the first of these was held in Lima. They are designed to bring together high-level public and private actors to launch new initiatives and provide an opportunity for initiative proponents to attract new public and private participants, and tap the financial and other resources of the UNFCCC.

Visibility and continued engagement: The NAZCA portal. The portal – a UNFCCC website that recognises voluntary action by non-state actors – already includes a substantial number of the currently existing international cooperative initiatives. At present, the portal does not count the emissions reductions that are occurring as a result of the initiatives, either individually or in the aggregate. If the methodological and political considerations are overcome, a form of monitoring and reporting could be added to the NAZCA portal, which would give further and continued recognition and engagement of the initiatives of non-state actors, separate from the obligations of states to take action and report.

Mobilising action

There are significant opportunities for mobilising climate action through the building block strategies. This mobilisation is necessary to complement and support country mitigation programmes in achieving the overriding goal of ensuring that emissions peak and begin to decline in the near term. Capitalising on these opportunities will require concerted effort from public and private actors to participate in initiatives and act as initiative entrepreneurs. Also needed are support systems that assist entrepreneurs in creating new initiatives. While many see the UNFCCC as only focusing on the 'ends', particularly targets for national emissions reductions, the recent institutional developments that we outlined above have allowed for a new focus on the 'means' of developing climate action. While these new UNFCCC institutional developments provide some of the necessary components of acting as a support system for building block initiatives that would complement initiatives by national governments, they are not well linked, and there is no institutional focus on supporting initiatives from idea, to incubation, to launch. The UNFCCC does not have to be the only support system. There is much that NGOs, businesses, governments, research institutes and foundations can and should do to assist initiative entrepreneurs.

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About the authors

Richard B. Stewart is University Professor and John E. Sexton Professor of Law at the New York University School of Law. A specialist in environmental, regulatory and administrative law, he has served as assistant attorney general in charge of the

Environment and Natural Resources Division of the US Department of Justice and Chairman of the Environmental Defense Fund, and was a faculty member at Harvard Law School. His current research projects include 'megaregional' international agreements on regulation, trade, and investment; using law to reform and secure justice in global governance; private and hybrid global regulation; innovative institutional strategies to reduce greenhouse gas emissions; and solving the challenge of nuclear waste. Stewart also works on global climate law initiatives, electricity sector reform, and environmental law reform projects in developing countries through the International Environmental Law Clinic and the Guarini Center on Environmental, Energy, and Land Use Law.

Michael Oppenheimer is the Albert G. Milbank Professor of Geosciences and International Affairs at Princeton University and Director of Princeton's Program in Science, Technology and Environmental Policy (STEP). He joined the Princeton faculty in 2002 after more than two decades with the Environmental Defense Fund, where he served as chief scientist and headed the Climate and Air Program. Previously, he was Atomic and Molecular Astrophysicist at the Harvard-Smithsonian Center for Astrophysics. Oppenheimer is a long-time participant in the Intergovernmental Panel on Climate Change (IPCC), which won the Nobel Peace Prize in 2007, and a coordinating lead author on IPCC's Fifth Assessment. Oppenheimer coedits the journal *Climatic Change*. He serves on the US National Academies Board on Energy and Environmental Systems and the New York Panel on Climate Change, and is science advisor to the Environmental Defense Fund. His research focuses on the science and policy aspects of climate change and its impacts.

Bryce Rudyk is Adjunct Professor and Director, Climate Programs at the Guarini Center on Environmental, Energy and Land Use Law at the New York University School of Law. For 2014-2015, he is the Senior Legal Advisor to the Chair of the Alliance of Small Island States (AOSIS), the negotiating block for 44 countries in the UNFCCC negotiations. He joined NYU in 2009 after working in private law practice and lobbying. He teaches in international environmental law, global governance and climate change. His research focuses on global environmental institutions and climate change.