
14 After the failure of top-down mandates: The role of experimental governance in climate change policy

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The failure of the Kyoto process to generate an effective and integrated international regime reflects a lack of willingness of major states, in the presence of uncertainty, to make commitments to a demanding set of targets and timetables. In conjunction with strong conflicts of interest and fragmentation of power and capability, the result has been a decentralised ‘regime complex for climate change’ rather than an integrated international regime. Since ‘top-down’ approaches have failed, it is important to think about how more experimentalist, ‘bottom-up’ arrangements might work, by decomposing problems into smaller units that facilitate testing and learning. For such an approach to be effective for climate change issues, three tasks must be performed: (1) participants need to articulate their shared goals; (2) there must be significant costs to participants of inaction – a ‘penalty default’ that can induce cooperation where it is not spontaneously forthcoming; and (3) institutions to assess national pledges and help stitch them together must be developed. The most optimistic scenario for Paris is that it sets in motion a process that promotes learning and cooperation and that, over time, could have transformative impacts on the politics of climate cooperation.

The failure of the Kyoto process to generate an effective and integrated international regime has allowed for the emergence of what we have called ‘the regime complex

¹ We acknowledge discussions with Ottmar Edenhofer, Bryce Rudyk, Michael Oppenheimer, Richard Stewart and Charles Sabel. This chapter is based, in part, on Keohane (2015) and Sabel and Victor (2015).

for climate change' (Keohane and Victor 2011). We interpret the decentralised and partially overlapping regulatory efforts that now exist as reflecting strong conflicts of interest and fragmentation of power and capability. The issue now is whether there is a pathway forward that is both feasible and effective. Timetables and binding targets have not worked, attracting few countries outside of the EU; that is, 'top-down' approaches have failed. This is the theme of Section 1 of this chapter. In Section 2 we look at how 'bottom-up' might actually evolve in productive directions.

1 The top-down approach: Failure and poor prospects

It is now widely recognised that the Kyoto approach was a failure. The Framework Agreement on Climate Change – the 'UN F triple-C' agreement – made in 1992 contained few specifics and no meaningful commitments beyond the obligation to report. In the Berlin Mandate, agreed in 1995, rich countries agreed to exempt developing countries from obligations, without a clearly specified phase-out period. But the developing countries grew rapidly – China is by far the largest emitter today and emissions of other developing countries are growing fast (IPCC 2014). Developing countries have a strong and legitimate interest in ensuring that action on climate change will not condemn them to perpetual poverty by slowing rates of economic growth. But once given an entitlement to emit, countries classified as 'developing' were reluctant to give it up even as their growth, and emissions, rose. And rich countries – not just the US but also Australia, Canada, and eventually Japan – were unwilling to accept costly limits on their own emissions that would not solve the problem as long as developing countries' emissions were rising so fast. The EU was the one notable exception, and it went ahead with costly controls – largely driven by its own internal political needs. With all these diverging preferences, diplomatic deadlock resulted (Victor 2011, Hale et al. 2013).

In this context, it is easy to understand why Kyoto was more of a façade than a real scheme for policy coordination. It largely ratified what countries would have implemented anyway – except perhaps the US, which never joined. And it was steeped with accounting tricks that were abused as well. Particularly striking was the abuse of the Clean Development Mechanism (CDM), through which host governments sought certification of proposed credits for projects and dealt with verifiers who were

dependent on the host governments for future business. Purchasers of the credits had few incentives to assure that projects were genuine, only that the credits were certified. Not surprisingly, some estimates indicate that many of the permits represented phony emissions reductions (Wara 2008). Indeed, the CDM even generated perverse incentives, reducing incentives for developing country governments to enact policies permanently reducing their emissions in favour of continuing overall high-emissions policies and then earning credits from projects that had inflated emissions baselines.

So Kyoto got it wrong in two ways: at the core of the regime, states did not have incentives to commit to ambitious targets, much less legally binding ones; and at the periphery, many of the characteristic dysfunctions of international organisations manifested themselves.

The current round of talks is premised on an arrangement that has been called ‘pledge and review’, although the exact names vary. Some call this approach to negotiating international commitments through pledges and smaller groups of commitments the ‘building blocks’ approach. Others refer to the scheme as building ‘coalitions of the willing’ (Falkner et al. 2010, Stewart et al. 2013). Today, formally, climate diplomacy calls these bottom-up pledges ‘Intended Nationally Determined Contributions’, or INDCs. In this pledge and review scheme, targets are not legally binding but once the pledges are made and accepted, states are expected to have incentives to fulfil them for reputational reasons. Indeed, this process has already begun to unfold, such as with the bilateral pledges announced by the US and China in November 2014. The US had an incentive to declare serious pledges of its own in order to induce China to do so as well – reciprocity is often important in world politics. But the incentives for this process to work remain weak. The Lima Declaration of December 2014 encouraged countries to submit targets by 31 March 2015. But when that deadline approached only a handful of parties – the US, the EU, and a few others – had actually bothered to submit pledges. The new planning goal for these pledges is early October 2015, leaving the Climate Change secretariat just a month to figure out what the totality of all the pledges implies for the overall health of the planet. The news is unlikely to be good; indeed, a growing number of studies are pointing to the reality that widely discussed goals of stopping global warming at 2°C is impractical, and the models used to study those scenarios are based on unrealistic technological and political assumptions (Fuss et al.

2014). Similarly, grand aspirations in Lima to develop strong review mechanisms that could monitor implementation and compliance with INDCs are, so far, leading to more disagreement than practical institution building.

Pledge and review can be seen in two ways. It can be seen cynically, merely as a euphemism for not changing policy in any substantial way. In this view, pledge and review essentially constitutes what Stephen D. Krasner calls ‘organised hypocrisy’ – pretending to take serious steps while actually proceeding with business as usual (Krasner 1999). On the ground, in Asia, trends are strongly toward more emissions. In India and Vietnam, there are scores of coal-fired power plants either under construction or in the serious planning stages. In India, for example, there are 381 gigawatts of coal-fired plants under construction or planned, which would more than triple current capacity of about 178 gigawatts, and in Vietnam the capacity of plants under construction or planned is over 48 gigawatts – a sixfold increase over current capacity. Over two-thirds of the new power plants under construction or planned in these countries will be coal-fired. The talk is all of limitations on emissions, but the reality is more emissions.²

Of course, the full story is a complex one. More economic growth means higher demand for electric power. But some countries are diversifying their power industries in ways that are slowing, if not stopping, the growth in emissions – in China, for example, a slower economy, aggressive energy efficiency, and support for new power sources including nuclear and renewables are leading to ‘peak coal’ in the next few years and most likely a peak in emissions over the next decade. That’s better news than unfettered growth in emissions, but slower growth is still a far cry from the cuts of 50% or more from current levels that would be needed globally to stop warming.

But public cynicism may be counterproductive – sometimes, surprises occur. And in any case, hypocrisy is what Judith Shklar called an ‘ordinary vice’ (Shklar 1985), and not as bad as some other vices because at least it recognises virtue even if it does not observe it. The positive spin on pledge and review is that it could start a process of commitments, monitoring, persuasion, and imitation that could eventually generate

² Research by Phillip Hannan based on data and methodology explained in Hannam et al. (forthcoming); see also IEA (2014).

some meaningful action on climate change. The Lima Declaration's vision for INDCs and review, for example, provides for the engagement of experts from civil society and the private sector, which some commentators argue could be used to facilitate 'bottom-up' arrangements to promote emissions reductions measures (Stewart et al. 2015a, 2015b). In any case, for the negotiators there is now little alternative to trying to make pledge and review work, since the mandatory targets and timetables approach is dead in the water.

If approached without illusions about likely breakthroughs, the Paris meeting can at least avoid a demoralising setback – it can avoid becoming a 'Copenhagen II'. Indeed, there is growing evidence that the French government hosts are organising themselves around exactly that mission – to avoid failure. But there is little reason to be optimistic. It seems likely that both pledge and review and attempts to foster 'bottom-up' arrangements without a binding overall agreement will have insufficient effects on this massive problem. We need to think more about these issues outside of the 'UN F Triple-C box'.

2 Towards an effective experimental governance of climate change

Climate change is marked by two intertwined sets of characteristics that make integrated, top-down bargaining all but impossible. The first set is political – the fragmentation of power and authority in the international system, and the corresponding absence of a hegemon to impose order on actors with sharply divergent interests. The second is cognitive – uncertainty about the feasibility of achieving policy outcomes, such as lower emissions, at acceptable costs. This uncertainty explains the inability of any country or firm that takes deep decarbonisation of emissions seriously to identify *ex ante* what behavioural, technological and regulatory commitments will actually prove most effective. This shroud of uncertainty about the actual burdens of various commitments exacerbates the bargaining problems; the bargaining problems in turn heighten the sense of uncertainty as key parties cannot anticipate – and must fear – how counterparts will react to the frustration of expectations (Young 1989a, 1989b). If it is unknown at the time of bargaining which commitments really can be fulfilled and how others will respond if some are not, bargaining among parties with sharply different

interests will be highly complex and cautious to the point of paralysis. Risk-averse players will prefer deadlock to codifying ambitions that may prove too costly or simply unattainable (Abbott and Snidal 2000, Hafner-Burton et al. 2012).

Mindful of these difficulties in pursuing top-down bargaining, at best Paris will represent one step on a long road of efforts to build an effective bottom-up system. But pledge and review, although not a solution to the climate problem, *could* lead to a process of experimentation and momentum building. That is, it could help governments and other critical players determine what is feasible through coordination and it could establish some momentum in negotiations, so that countries not making serious efforts could be embarrassed as laggards. Countries willing to do more could learn how to connect and integrate their efforts into truly interdependent, deep cooperation. In an optimistic scenario, this process could, through a series of increasingly serious steps, move pledge and review to a more coordinated and effective effort in the long run.

Although such an outcome may not be likely, we see it as possible and we believe, therefore, that it is worthwhile to explore how such a positive process might unfold – and what would be necessary within and outside the UNFCCC process. Many conditions would need to be satisfied for this experimental and momentum-building process to work. There needs to be serious review, countries need to be willing to adjust their commitments in light of new information, and there need to be incentives for integration over time. Meeting these conditions is far from assured. Yet in the absence of any assured pathway to success, it is worthwhile to explore this experimental, momentum-building scenario.

The central insight of experimental governance (XG) is that seemingly impossible large problems can be decomposed into smaller units that facilitate testing and learning from experiments. Originally developed for understanding regulation and the provision of complex public goods, such as education, under uncertainty in the US and the EU (Sabel and Zeitlin 2008), XG has similar potential applications at the global level (De Búrca et al. 2014). XG emphasises that regulator and regulated, alike, rarely know what is feasible when they begin to tackle a problem under uncertainty; it prizes a diversity of efforts rather than monopoly. It identifies and continuously improves upon solutions that work – and pushes them to scale – while siphoning resources away from those that don't.

Applied to climate, XG suggests a focus on three tasks. First, participants need to articulate their shared goals in a way that implies specific initial actions, to be reviewed systematically with the expectation that they will be adjusted over time. Such an experimental process may make agreement on goals easier to secure because the actors know that specific steps toward achieving the target are subject to careful review, in which they will have a part. While the UNFCCC process has set some goals – such as articulated in Article 2 and with the goal of stopping warming at 1.5-2°C degrees – these goals have been either too abstract or unachievable to specify near-term actions.

Various groups of ground-level actors are then assigned responsibility for achieving pieces of the goal. They are authorised to search for and develop solutions as their experience suggests, but on the condition that they report results to the convening authority. The results are then compared through various forms of peer review so successes can be quickly identified and generalised if possible, failures rejected early on, and faltering efforts corrected in view of the advances of more promising ones. Where experience warrants, the goals themselves are revised – targets tightened, relaxed, or extended to new domains – and the revised goals are the starting point for the next round of local exploration. Over the next few years – perhaps as early as Paris – there will need to be a rethinking of the widely discussed goals of stopping global warming at 1.5 or 2°C (Victor and Kennel 2014). That process, bound to be highly controversial, would benefit from tangible ground-level knowledge about what countries can actually do to regulate emissions.

The second key task is to ensure that there are significant costs to participants of inaction. The engine that drives experimental governance is not a starry-eyed assumption that actors want solutions. Instead, XG relies on a ‘penalty default’ that can induce cooperation where it is not spontaneously forthcoming. A penalty default is a draconian sanction – exclusion from a valued market or denial of an indispensable permit or license – imposed for persistent violation of the regime’s norms. It is a form of enforcement that does not prescribe solutions – which may be impossible to agree on because states likely to be targeted will block them – but that forces the actors to cooperate unless they are willing to risk losing control of their joint fate. Under the shadow of a penalty default, experimental governance uses deliberation to help actors

redefine their interests. Penalty defaults are thus at one and the same time information forcing and deliberation enhancing.

Other published work explores in more detail where penalty defaults may arise in the international system (De Búrca et al. 2014, Sabel and Victor 2015). Here we point just to the need for these penalties as an engine for cooperative efforts. Important sources of penalties in climate change will include the threat of trade sanctions and loss of markets, and, within countries, the threat of regulatory intervention that firms might forestall through actions of their own to self-regulate effectively.

There will be tremendous pressures in the multilateral context to avoid or disarm the mechanisms, such as trade sanctions, that could be used to threaten penalties that inspire experimentation and cooperation. Universal forums abhor unilateral and club actions. It will be important to resist efforts to outlaw penalties such as trade sanctions; a vague agreement at Paris would be preferable to one that eliminated the possibility of enacting such penalty defaults.

A third task is to develop the institutions that will be needed to assess national pledges and help stitch them together into more integrated and demanding international cooperation. A suite of agreed metrics will be necessary, as discussed in the contribution to this eBook by Aldy and Pizer (2015). Pledges should contain not just information about what countries aspire to do but also what has been tried, what worked, and what failed. Pledges could also be made conditional on others' actions and experimental, so they would signal to other countries what nations will try, not just what they will do. Introducing such an experimental orientation could lead to more constructive bargaining around joint gains as well as to more robust learning about what really works. Making productive use of these pledges will require institutionalised arrangements to ensure that reviews are serious so there is genuine monitoring of pledges and pressure to fulfil them (Victor et al. 1998).

An open question is exactly how the UN system would perform these monitoring and review functions. In the past the Climate Change secretariat has been assigned similar tasks, but it hasn't been given the authority needed for serious monitoring and review – an outcome that is hardly surprising since the UNFCCC operates under consensus rules and many members are wary of untested review mechanisms. The IPCC can't

take on this role because it is not designed to make political judgements. All of these official UN institutions face the problem that their authority depends upon consensus and the very act of performing serious monitoring and review almost guarantees that some states will object. The best options probably lie outside the UN system, but are supportive of it. NGOs, supported by expert knowledge, could play a big role. Some countries could volunteer to have their national pledges scrutinised closely because they want to demonstrate how effective reviews actually work. These analyses would be reviewed in the peer-reviewed literature, after which IPCC could cite them.

3 Conclusion

The inability of nations to develop an integrated top-down climate regime is now widely accepted, and that new reality will be on full display at COP21 in Paris. The road to Paris is being paved with bottom-up efforts, most notably the scheme of national pledging organised around INDCs.

Whether this new strategy will be any better than the status quo – an anarchic outcome in which countries follow their self-interests and there is no real international collaboration –remains to be seen. Some of the pledges being made for Paris are encouraging, although we are sceptical that Paris will take the world very far, in itself, toward mitigating climate change. But the Paris meeting could set in motion a process that promotes learning and cooperation and that, over time, could have transformative impacts on the politics of climate cooperation. Whether that happens will hinge on whether the INDCs become more informative, whether countries that want cooperation can threaten penalties to those who don't, and whether new institutions are created that will review, assess and eventually help merge the INDCs into more collective efforts. Some of that can be done inside the UNFCCC box, but the hardest tasks – such as threatening sanctions and building effective review mechanisms – will require sympathetic efforts from the outside as well.

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