CLIMATE POLICY

Risk-averse governments

Relative to the scale of the problem, climate policies worldwide have failed. Now research explains why policy innovations are often inadequate, routinely reflecting the aversion of policymakers to the risk of failure.

Paul G. Harris

hen historians look back at policies intended to curb the world's greenhouse gas emissions, they will conclude that they involved more science, diplomacy, politics and policy activity than anything else in human history. They will also conclude that they failed¹. Why has climate policy been so utterly impotent relative to the scale of the problem? Writing in Global Environmental Change, Michael Howlett² reveals that the failure of innovative policies to address climate change is worryingly routine. Governments are riskaverse and "happier to do nothing or little rather than do something that might lead them to be blamed for failure"2. When they do take action, it is not to address an issue for societal improvement (positive action) but primarily a procedural act, often of little practical consequence, sometimes involving attacking opponents or denying a problem altogether to maintain the status quo (negative action).

Government policy is supposed to solve problems. This provides a good rough definition of policy success: if a problem is solved, related policies are successful; if the problem remains or becomes worse, policies have failed. From this perspective, innovative policies to address climate change — realistically to avoid its severe effects through mitigating and eventually phasing out most activities leading to greenhouse gas pollution — have failed3. There is certainly no shortage of climate policy innovation: a plethora of solutions, often associated with energy efficiency and moves towards non-carbon sources of energy, are being implemented around the world. Nevertheless, the level of emissions causing climate change continues to increase³.

For those who closely analyse the issue of climate change, it is clear that the problem will cause great harm to the environment, societies and individuals in the future⁴, even if specific details about which ecosystems and societies will be most harmed remain elusive⁵. Cost-effective policy options are readily available⁶. Yet governments stumble into the future, many implementing policies



Making climate policy at Copenhagen: happier doing nothing?

with little real impact, others rolling out more robust ones that change behaviour, albeit far too little, and more than a few still denying the significance of the problem.

Although one would normally assume that government policies are intended to address problems positively — to solve them — this is frequently not the case. Using theory from the policy sciences. Howlett's study shows that politicians — and not only those elected democratically — are extremely averse to the risk of failure. In practice this means that they routinely seek to avoid policies that could conceivably be interpreted by the public to be failures for which the politicians might one day be held responsible, such as at the next election. Consequently, governments often devise and implement negative policy innovations, for example, "propaganda or discouragement of interest group formation or the denial of a problem or its rejection in order to limit or eliminate the need for more substantive action" 2.

Governments like to claim credit for successful policies but are averse to the risk

of being blamed for failure. On balance, when it is plausible for them to deny responsibility for a problem, they place much more value on avoiding blame than on gaining credit. For example, politicians are not normally blamed for heavy rain and floods, so they are unlikely to fund and implement policies that would require citizens and businesses to move away from flood-prone areas. This is largely because these same politicians would be unlikely to gain credit for the benefits that might come to those who have been moved. It is more likely that they would be blamed for raising taxes to fund schemes that push people from their homes. In short, when deniability is an option, the actions of governments are characterized by a negativity bias — weak policies or those that stonewall effective action are preferred over innovative and operationally effective solutions.

Although abnormal climate change is recognized by climate scientists as largely being caused by humans, significant segments of the public in most countries perceive it as mostly a natural phenomenon and, as such, beyond the control of policymakers⁷. Citizens may be more likely to blame politicians for the real or perceived effects of climate policies than for those of climate change itself. Until the public, and in turn policymakers, value policy actions on climate change as much as it fears the possible consequences of those actions for things that it cares about, such as economic growth, innovations in climate policy will tend to be negative.

What is particularly interesting about this study is that such a conclusion is, in hindsight, blindingly obvious. Policy research has shown for decades that in most areas crying out for effective policy innovations, including those on health, poverty or the environment, such innovations are extremely rare8. Instead, new policies tend to be negative — at best they usually involve minor alterations to existing policies rather than robust interventions that change the status quo. Why should policy innovation on climate change be different? Indeed, climate change is even more vulnerable to policy negativity than many other issue areas because it is an extraordinarily complex environmental phenomenon. It requires policies that will affect nearly everyone — often hitting

individuals in the pocket through higher prices for energy or by requiring them to stop common behaviours that result in greenhouse gas pollution — however, in most cases results will materialize only in the relatively distant future, beyond the terms of office of those making the policies.

As long as governments continue to claim that extreme weather events and other likely manifestations of climate change are unpredictable, unavoidable or simply natural — as, for example, when Australian Prime Minister Tony Abbot responded to extremely deadly wildfires by arguing that Australia has always had wildfires⁹ — policy innovations will be too little, too late at best. At worst they will involve attacking the science of climate change, which has been the case for decades, most profoundly in the USA¹⁰.

The implication of the bias towards negative policy innovation is worrying: only when the consequences of climate change are severe enough to consistently evoke strong public concern will policy innovation be positive. As Howlett puts it, an "increase in the visibility of climate change effects is likely to increase the need for governments to respond on a more consistent and substantive basis," even if governments are not yet held responsible for creating the problem.

Sadly, by the time climate change impacts are bad enough for policymakers to react effectively, it will probably be too late. Policy innovation in the near future can, at best, mitigate the worst effects of climate change in the distant future. Even positive policy innovation now cannot avoid negative outcomes for future generations. Whatever the future policy scenario, substantial negativity is inevitable.

Paul G. Harris is at the Hong Kong Institute of Education, 10 Lo Ping Road, Tai Po, Hong Kong, China. e-mail: pharris@ied.edu.hk

References

- 1. Harris, P. G. Nat. Resour. J. 47, 195-224 (2007).
- 2. Howlett, M. Glob. Environ. Change http://doi.org/rtp (2014).
- 3. Peters, G. P. et al. Nature Clim. Change 3, 4-6 (2013).
- . IPCC Climate Change 2013: The Physical Science Basis (eds Stocker, E. F. et al.) (Cambridge Univ. Press, 2013).
- IPCC Climate Change 2007: Impacts, Adaptation and Vulnerability (eds Parry, M. L., Canziani, O. F., Palutikof, J. P., van der Linden, P. J. & Hanson, C. E.) (Cambridge Univ. Press, 2007).
- IPCC Climate Change 2007: Mitigation of Climate Change (eds Metz, B., Davidson, O. R., Bosch, P. R., Dave, R & Meyer, L. A.) (Cambridge Univ. Press, 2007).
- Conner, L. H. & Higginbotham, N. Glob. Environ. Change 23, 1852–1861 (2013).
- 8. Howlett, M. & Migone, A. Policy Soc. 30, 53-62 (2011).
- McGuirk, R. Huffington Post (25 October 2013); http://go.nature.com/g6DCMw
- Dunlap, R. E. & McCright, A. M. in *The Oxford Handbook of Climate Change and Society* (eds Dryzek, J. S., Norgaard, R. B. & Schlosberg, D.) 144–160 (Oxford Univ. Press, 2011).

WATER-ENERGY NEXUS

Assessing integrated systems

The various supply chains that deliver the services society needs are often managed in silos. Research now shows the advantages of integrated management.

Mark Howells and H-Holger Rogner

iving in the beautiful cities of Stockholm and Vienna we note. with some irritation, occasional interruptions to their scenic walkways. Striving to provide services, a street might get torn up several times within a few months. First to do sewage repairs, then to lay new high-capacity data cables and finally to increase the capacity of the gas mains — efforts that might cost three times more tax money than if these activities were coordinated. And this is just an example at local level — globally it can be worse. Our societies are simply not organized to undertake integrated planning and action1. We spend far more than we need to deliver the services societies

demand. Writing in *Environmental Science* and *Technology*, Bartos and Chester² show the missed opportunities from the lack of integrated water-energy management in the state of Arizona, USA.

The delivery systems of society's services consist of a chain of activity. They originate from natural resources and ecosystems. These are extracted, processed and transported to provide products and services. Those chains are shaped by economics, technology and policies — notably to ensure secure supplies.

Society's 'delivery chains' have traditionally been managed individually. Initially, interactions between many chains were largely inconsequential — their

supplies were abundant and our demand was small. For practical reasons, separate management also allows for delineated responsibility and focused planning. Hence, at all governmental levels, we find authorities for energy, water, agriculture and so on, each tasked with their own sectoral mandates. Such mandates often do not include any assessments of the impacts of action in one sector on others. A notable exception is the European Commission's Strategic Environmental Assessments. These assessments are required for certain types of public plans and programmes (for example, on land use, transport, waste and water management, energy and agriculture)3.