

61. Climate change mitigation, a problem of injustice

by
Steve Vanderheiden

Climate change can be seen as an issue of intergenerational justice, and the ideals of equity and responsibility identified by the 1992 UN Framework Convention on Climate Change are a useful framework for debating the architecture of international climate policy. Theories of justice from philosophy and political science allow competing proposals and objectives for climate justice to be evaluated.

The 1992 United Nations Framework Convention on Climate Change (UNFCCC) identified anthropogenic climate change as a problem of injustice, and proposed international cooperation, bounded by ideals of justice, as a response. Signatories agree to “protect the climate system for the benefit of present and future generations of humankind”. The convention also states that international action should be agreed on the basis of equity and in accordance with the “common but differentiated responsibilities” of nation-state parties (Article 3, Principle 1). Identifying the climate system as an international and intergenerational public good, the UNFCCC maintains that protecting the climate system is imperative in the name of justice, and that failure to do this would harm those most vulnerable to climate change but least responsible for causing it. To determine who is responsible for lessening the damage, equity and responsibility require remedial liability principles, based on specific theoretical accounts of justice, which have served as the main points for international policy debates.

Given the range of environmental, social and economic impacts expected as a result of the accumulation of greenhouse gases (IPCC, 2007), the UNFCCC identified the “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” (Article 2) as its “ultimate objective”. One way to set the threshold of what is dangerous involves setting limits to maximum global temperature increases. Indeed, the unratified 2009 Copenhagen Accord aimed to limit warming to 2°C this century. Scientists estimate that this would require a reduction in greenhouse gas emissions of approximately 80% by 2050, meaning that every country would have to take significant action soon. Decarbonisation targets far higher than the average 5% decrease in emissions demanded by the 1997 Kyoto Protocol would be necessary.

Equity

The failure to mitigate climate change and avoid its most serious negative impacts would disproportionately harm those most vulnerable to changes in rainfall patterns or sea levels. Poor people are the most vulnerable to climate change and contribute relatively little per capita to greenhouse gas emissions. Similarly, future generations have not yet contributed to climate change but are expected to suffer from its effects: their protection can be described in terms of equity imperatives.

In this way, mitigating climate change can be seen as a resource-sharing problem in which national emissions are subject to principles of distributive justice (Caney, 2005; Vanderheiden, 2008). With climate change, the resource to be shared between and within states is the absorptive capacity for emissions, in other words the capacity of the Earth to absorb greenhouse gas emissions so that they do not accumulate in the atmosphere and affect the climate. This would also determine the level beyond which further emissions would have a detrimental impact on the climate. Much of this capacity lies within national borders in the form of carbon sinks (such as forests), which can be improved or supplemented with artificial sequestration technologies. However, these resources are shared in the sense that carbon sinks absorb greenhouse gases no matter where the gases originate. Determining at what level national emissions should be capped can be seen in terms of allocating shares of this resource, informed by principles of justice.

Carbon dioxide emissions absorbed by sinks are benign, while other greenhouse gas emissions accumulating in the atmosphere are harmful. Equitable access to carbon sinks is therefore concerned with equity in terms of the levels of emission, often stated in terms of per capita national emissions entitlements under an international regulatory scheme. Alternatively, equity could refer to the sharing of decarbonisation burdens, in terms of mitigation costs or of percentage reductions in relation to a baseline.

The Kyoto Protocol is a modified version of this burden-sharing approach, with national emissions caps assigned an average reduction of 5% from 1990 baselines. This equity imperative from the UNFCCC is rejected by most climate justice scholars, as it does nothing to change the highly inequitable resource sharing among developed countries and between developed and developing countries. Whether this is a problem of the equitable allocation of a common resource, or of burdens in trying to protect the climate system, assigning national emissions targets implies the application of justice principles to one or the other. The problem is how (if at all) such principles can justify inequality in the benefits or the burdens.

Responsibility

However, the UNFCCC language that immediately follows the reference to equity identifies a second criterion for assigning remedial obligations, by apportioning responsibility. Responsibility focuses on past and present contributions to climate-related harm. This requires the costs associated with avoiding or correcting the harm to be assigned in proportion to the role played by each party in it (Shue, 1999). The UNFCCC takes this to mean that the more responsible developed countries should take the lead in mitigation efforts, or in other words, that the differences in developed countries' responsibilities warrant differentiated remedial burdens. Those with higher emissions may have to pay more to lessen the damage, given their greater responsibility for it.

Countries have different views on the role that historical emissions should play in assessing current liability. India embraces the idea of “climate debt”, which bases current liability on a country’s full historical emissions and applies a strict liability standard. Under this scheme, recently industrialised countries appear less responsible than they would under schemes based on current or recent emissions only. The United States rejects the concept of differentiated responsibilities even when based on current or recent past emissions only. Others only take into account current and recent emissions, not including those emitted prior to the first Intergovernmental Panel on Climate Change (IPCC) assessment report, in 1990. The question remains whether or how much a country’s past emissions record requires it to pay for future remedial obligation, through either mitigation or adaptation.

Conclusion

Whether responsibility for climate change should be determined by a country’s full emissions or just some of them, and whether equity is a resource-sharing problem of distributing national entitlements to absorptive capacity or a burden-sharing exercise, determines how we should measure climate change and helps us identify potential solutions. Research into climate justice has highlighted the distributive questions that mitigating climate change raises, as well as the key issues involved in linking remedial action to past responsibility. Research has also offered various ways to examine fairness and responsibility. Yet there is still no agreement that climate justice requires significant action to mitigate climate change, because such justice demands that developed countries take action to decarbonise to a far greater degree than other nations.

Bibliography

- Caney, S. (2005), “Cosmopolitan justice, responsibility, and global climate change”, *Leiden Journal of International Law*, Vol. 18/4, pp. 747-775, <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=371031>.
- IPCC (2007), *Climate Change 2007: A Synthesis Report. A Contribution of Working Groups I, II and III to the Fourth Assessment Report of the IPCC*, Intergovernmental Panel on Climate Change, Geneva, www.ipcc.ch/.../publications_ipcc_fourth_assessment_report_synthesis_.
- IPCC (2001), *Climate Change 2001: A Synthesis Report. A Contribution of Working Groups I, II, and III to the Third Assessment Report of the IPCC*, Intergovernmental Panel on Climate Change, Cambridge University Press, New York, www.ipcc.ch/pdf/climate-changes-2001/synthesis.../synthesis-spm-en.pdf.
- Shue, H. (1999), “Global environment and international inequality”, *International Affairs*, Vol. 75/3, pp. 531-45, www.chathamhouse.org/sites/default/files/public/.../inta092.pdf.
- United Nations (1992), United Nations Framework Convention on Climate Change, Bonn, http://unfccc.int/essential_background/convention/items/6036.php.
- Vanderheiden, S. J. (2008), *Atmospheric Justice: A Political Theory of Climate Change*, Oxford University Press, New York.

Steve Vanderheiden is associate professor of political science and environmental studies at the University of Colorado, United States, and professorial fellow at the Centre for Applied Philosophy and Public Ethics, Charles Sturt University, Australia. He is the author of *Atmospheric Justice: A Political Theory of Climate Change*.