

COMMENTARY

The importance of expressly integrating ethical analyses into climate change policy formation

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Climate change raises profound and significant ethical questions. For example, a decision on an atmospheric greenhouse gas (GHG) stabilization level will determine such things as which plants and animals will survive; which people will be vulnerable to rising seas; the location and timing of droughts and floods; the distribution of vector-borne disease; and the incidence of storm damage. Climate change will also force nations to decide whether they support the establishment of a just international agreement or whether they will pursue a policy of narrow national self-interest, because those nations who emit the most GHGs are not the same as those who are most vulnerable to climate change.

The last two Conference of Parties (COP-10, COP-11) meetings under the United Nations Framework Convention on Climate Change (UNFCCC) were held in December 2004 in Buenos Aires and December 2005 in Montreal, respectively. These meetings were important because they were the first to be held after ratification by the necessary number of countries to bring the Kyoto Treaty into force, which occurred on 16 February 2005; these were also the first meetings since it became clear that most developed nations of the world are going to move ahead and limit greenhouse gases, despite the USA's refusal to sign the Treaty. As we comment below, we believe that there should be a greater emphasis on the ethical issues raised by global climate change and these ethical questions should be expressly considered during future climate change negotiations, and in the work of the International Panel on Climate Change. Our point is that scientific and public policy climate change issues and decisions raise serious but rarely considered ethical issues.¹ Furthermore, these ethical considerations need to be integrated into the scientific and economic discussions of climate change policy options for the following reasons:

1. *Scientific and economic discussions about climate change policy options raise ethical questions that are often not adequately considered in policy discussions.* For example, cost–benefit analysis

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of climate change policy options raises important questions of distributive and procedural justice about which harms have been considered, how they have been valued, and whether those who might be harmed have been consulted about methodological assumptions if a cost–benefit analysis is used prescriptively. Also decision-making in the face of scientific uncertainty raises ethical questions about who should bear the burden of proof and whether low probability but potentially catastrophic impacts should be considered in policy making and who decides this. If the ethical issues raised by our scientific and economic policy tools are ignored, then climate change solutions may be unfair and unjust. Although ethics should be a critical consideration in forming climate change policy and the basis for actions to mitigate global climate change, all too often the discussions are couched in scientific and economic language that sometimes both hides the unexamined normative assumptions of the disciplines that need to be examined expressly and hinders understanding of the relevant ethical issues.

2. *The failure to expressly consider certain ethical questions is tantamount to a failure to consider many current barriers to progress in climate change negotiations.* That is, not only could the failure to examine the ethical issues associated with climate change lead to unjust responses, but this oversight would also have practical consequences. For instance, climate change negotiations have often been stalled by disagreements between rich and poor countries about what is fair in creating global GHG emissions reductions strategies, yet the different assumptions about what constitutes fairness that are the basis for disagreements are not seriously examined. An express ethical analysis of these issues would narrow the range of positions that would satisfy well-established principles of justice. Therefore, express consideration of ethical questions may be needed in order to achieve the consensus that is urgently needed before a global climate change solution can be achieved.
3. *There is a need to further define ethical principles already referenced in international agreements.* Some principles already contained in climate change agreements that should guide decisions about climate change are not clearly defined in the international instruments. For instance, under the UNFCCC, developed nations agreed to reduce emissions based upon ‘equity’, yet no serious discussion of what equity requires has been considered thus far in negotiations.² Typically, discourse on climate change is dominated by the rhetoric of the rich nations, who have the power to define politically and economically what is meant by ‘equity’ and ‘fairness’. Many of the proposals that nations have made to define ‘equity’ would not survive a serious ethical critique.
4. *Ethical questions about climate change policy options raise scientific questions.* For instance, the question of what equity requires in setting an atmospheric GHG stabilization target raises scientific questions about how damages will be distributed among those harmed. Another example of a scientific question that is raised by ethical considerations is: ‘If polluters have an equitable duty to pay for unavoidable climate change damages, what proportion of these damages are attributable to human activities rather than natural climate variability?’ If ethics and science are not integrated in policy formation, then the science needed to respond to ethical concerns will not be available.

For these reasons, climate change policy formation needs to integrate scientific, economic, and ethical questions. Because of the importance of the ethical dimensions of climate change, eight organizations launched the Collaborative Program on the Ethical Dimensions of Climate Change

(CPEDCC) during the UNFCCC COP-10 in Buenos Aires.³ At COP-10, CPEDDC issued the *Buenos Aires Declaration on the Ethical Dimensions of Climate Change*, which further set out why express ethical reflection on climate change issues is urgent, called for international collaboration on these issues, and identified several priority climate change issues for ethical reflection.⁴ Subsequent work on the ‘Declaration’ continued during COP-11 in Montreal.

The Buenos Aires Declaration identified a number of important ethical issues that should be discussed more fully in subsequent climate negotiations. We therefore recommend that greater attention be paid to them. Among these questions are the following:

1. What ethical principles should guide the choice of specific climate change policy objectives including, but not limited to, maximum human-induced warming, and atmospheric greenhouse gas targets?
2. What are the ethical implications of scientific uncertainty about climate change impacts?
3. Who is ethically responsible for the consequences of climate change; that is, who is liable for the burdens of (a) preparing for and then responding to climate change (i.e. adaptation), and (b) unavoidable damages?
4. What ethical principles should be followed in allocating responsibility among people, organizations and governments at all levels so as to prevent ethically intolerable impacts from climate change?
5. What principles of procedural justice should be followed to assure fair representation at all levels in decision-making about climate change?
6. Are commonly used reasons for delaying climate change action ethically justified? These reasons include (a) costs to national economies, (b) the absence of developing nations’ emissions reduction targets, and, (c) the future invention of less-costly technologies.

The question of what equity requires in allocating national targets to assure that global atmospheric targets are achieved is an issue about which express ethical reflection has the potential to be particularly efficacious in resolving barriers in negotiations. This is so for several reasons, including:

1. As stated above, no agreement is likely unless equity is considered. As the Center for Science and the Environment, an institution in New Delhi, India, and a close observer of the climate negotiations, has stated: ‘Equity is a prerequisite for global agreement, and environmental cooperation can only be possible through solutions that are both equitable and ecologically effective. Without equity or a sense of fair play it is quite unlikely that there will be a long-lasting partnership to solve the global problems. Global equity is particularly important in global negotiations that deal with the pollution or degradation of global common property, such as the stratospheric ozone layer, the atmosphere, or oceans.’⁵
2. The problem of allocating GHG emission targets among nations is a classic problem of distributive justice. For this reason principles of distributive justice promise to be helpful in determining which allocation formula proposed by nations should be entitled to respect.
3. Climate negotiations thus far have not seriously considered principles of distributive justice in analyses of national proposals to implement the UNFCCC’s requirement that the developed nations reduce emissions based upon equity.

During subsequent climate change negotiations, CPEDCC recommends that serious attention be paid to the inadequately studied and too infrequently considered ethical issues entailed by the need to reduce the threat of global climate change. Such attention is necessary to ensure that climate change policies and decisions, and ultimately international law, are consistent with a just ethical framework and to overcome the barriers blocking progress on a global consensus.

Notes

- 1 There is a growing literature on climate change ethics, yet this literature has rarely been expressly considered in the climate change policy documents that are shaping much of the international climate change debate, including the work of the Independent Panel on Climate Change (IPCC). Moreover, much of this literature does not deal with some of the ethical issues that frequently arise in climate change negotiations. For a good bibliography on climate change ethics see Rock Ethics Institute (2005) and Gardiner (2004). For a discussion of the issues arising in climate change policy formation, see Lemons et al. (1995) and Brown (2002). For a discussion of the need to integrate ethics into science, see Sinnott-Armstrong and Howarth (2005).
- 2 United Nations Framework Convention on Climate Change (1992).
- 3 The organizations that formed the Collaborative Program on the Ethical Dimensions of Climate Change include The Rock Ethics Institute at Pennsylvania State University, the Pennsylvania Consortium for Interdisciplinary Environmental Policy, the IUCN Commission on Environmental Law–Ethics Working Group, the Centre for Applied Ethics at Cardiff University, the Centre For Global Ethics at Birmingham University, the Tyndall Centre for Climate Change Research, EcoEquity, and Oxford Climate Policy. The Rock Ethics Institute at Pennsylvania State University is the Secretariat for this Program (see <http://rockethics.psu.edu/climate/index.htm>).
- 4 Copies of *The Buenos Aires Draft Declaration on the Ethical Dimensions of Climate Change* are available from brown.d@state.pa.us and also at the CPEDCC website listed above.
- 5 See Agarwal et al. (1999).

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