and take action to transition to a just and sustainable energy economy. It decries the dangers of extreme fossil fuel extraction practices, and warns that dependence on fossil fuels sows "the seeds of war" globally.<sup>13</sup> The Church of England is also considering how its investments reflect on the urgency of climate change, describing climate change as "the great demon of our day."<sup>14</sup>

## Box 15-3 Climate Change Ethics

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Climate change ethics is an emerging branch of moral philosophy that is concerned with the source, shape, and stringency of climate-related responsibilities. It focuses on (a) what responsibilities a generation of people—and especially the current generation—has to address climate change and the threats it poses, and (b) how these responsibilities can be assigned fairly within each generation. While these foci are distinct, they may be connected; for example, a generation's responsibilities may arise from its contribution to climate change, and those nations that have contributed more to climate change, within a given generation, may have the greatest responsibilities to address it.

An emerging trend in climate change ethics is to distinguish between considerations of *justice* and *value*.<sup>1</sup> In this context, justice is concerned with what is due to individuals and nations, and value is concerned with what makes the world a better place. Central aspects of justice include the concepts of *rights*, *claims*, and *procedural fairness*; central concepts of value include the *goodness* and "badness" of outcomes.

To illustrate the distinction between justice and value, imagine a public health emergency in which officials must decide how to allocate scarce medical resources. At the start of the emergency, should the officials prioritize treatment of a physician over treatment of a laborer? One response, which invokes considerations of justice, is "No; it is not fair to do this since being a physician should not give one a stronger claim on a communal resource." Another response is "No one is owed greater priority based on one's profession." Nevertheless, it is consistent with this response that the physician should nonetheless receive priority so that he or she could help other people, thereby contributing much more goodness than otherwise—a response that invokes considerations of value. In the context of ethics, one must consider and reasonably balance justice and value.

Because of the great impact of economists on policymaking, much work on climate change ethics adopts economists' focus on value—trying to place a value on alternative mitigation and adaptation policies, depending on the severity of climate change.<sup>2</sup> This process is also relevant to justice. A justice-based claim against others—such as future generations' claim against us—is always, in part, a function of how bad the outcome might be.

In assessing the "badness" of climate change's threat to health, economists often assess the *value of a life* in terms of what individuals are willing to pay to reduce their probability of dying. This method is criticized by most ethicists, as it leads to the troubling view that a rich person's life is worth more than a poor person's.<sup>3</sup>

However, a greater ethical debate concerning climate change focuses on whether a life saved today is worth more than a life saved in the future. This is a debate over whether we

should discount the value of future health and well-being or discount the "badness" of future death and disability.

There are three reasons most often given for discounting future health benefits and burdens:<sup>4</sup>

- 1. People typically value present benefits more than future ones. This explains why people are willing to pay fees to borrow money for use now and why they demand to be paid interest when investing resources they could otherwise use now. However, from a social perspective, this is not a good reason to discount the value of future health benefits; it is difficult to understand why private financial decisions should be taken to yield insights into public morality.
- 2. The present generation is morally entitled to care more about itself than about future generations. After all, all people are entitled to some morally protected space within which to pursue their own goals. Many ethicists see merit in this perspective, but the specific nature and scope of this prerogative of self-concern is debatable. In addition, such a prerogative cannot make it permissible to harm others; it can only serve to lessen requirements to aid. Therefore, if climate change were to be viewed as an example of one generation harming other generations, this reason would not support discounting the "badness" of the adverse consequences of climate change.
- 3. It is permissible to discount future benefits and burdens because people in the future will enjoy higher levels of well-being than we do now, thanks to economic growth. If A is better off than B, it seems reasonable to treat benefits to A as worth less than similar benefits to B. But we must ask: Will future generations be better off than we are now? The answer to this question depends on the consequences of climate change. So this third reason for discounting future benefits must always be considered alongside the most reasonable empirical estimates concerning the undiscounted health consequences of climate change.

## Box References

- 1. Working Group III contribution to the Intergovernmental Panel Fifth Assessment Report: Social, economic and ethical concepts and methods. http://report.mitigation2014.org/drafts/final-draft-postplenary/ipcc\_wg3\_ar5\_final-draft\_postplenary\_chapter3.pdf. Accessed January 6, 2015.
- 2. Stern N. The economics of climate change: The Stern Review. Cambridge, UK: Cambridge University Press, 2007.
- 3. Broome J. Climate matters: Ethics in a warming world. New York: W. W. Norton and Company, 2012.
- 4. Dasgupta P. Discounting climate change. Journal of Risk and Uncertainty 2007; 37: 141-169.
- 5. Parfit D. Reasons and persons. Oxford, UK: Oxford University Press, 1984, Appendix F, pp. 480–486.
- 6. Caney S. Human rights, climate change, and discounting. Environmental Politics 2008; 17: 536-555.