

BOOK REVIEW: THE SUNNYSIDE OF CLIMATE CHANGE

Bjørn Lomborg, *Cool It: The Skeptical Environmentalist's Guide to Global Warming* (Alfred Knopf, N.Y., New York 2007), 253 pp.

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Bjørn Lomborg, an adjunct professor at the Copenhagen Business School, has a doctorate in political science, and he is also the founder and director of the Copenhagen Consensus Centre, which is affiliated with the Copenhagen Business School. The Copenhagen Consensus has undertaken the ambitious but some what vague and circular objective of “making decisions on the prioritization of the efforts to solve the major challenges of the world through the means of initiating, organizing and developing the Copenhagen Consensus Process.”¹ This Copenhagen Consensus Process apparently entails an annual meeting where economists and others rank the ills of the world and then propose an allocation of funds on the basis of “Where do extra resources do the most good first?”² Put another way, the members of the Copenhagen Consensus apply a cost–benefit approach in analyzing a variety of global problems and then rank the results in order of “biggest bang for the buck.”³ It is this cost–benefit approach that Dr. Lomborg applies with a vengeance to the important global problem of climate change in his latest book *Cool It: The Skeptical Environmentalist's Guide to Global Warming*.

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1. Copenhagen Consensus Ctr., By-laws for the Copenhagen Consensus Center, § 2 (in effect Jan. 1, 2006) (Den.), available at <http://www.copenhagenconsensus.com/Default.aspx?ID=756>.

2. BJØRN LOMBORG, COOL IT: THE SKEPTICAL ENVIRONMENTALIST'S GUIDE TO GLOBAL WARMING 42 (2007) [hereinafter COOL IT].

3. See Copenhagen Consensus Ctr., <http://www.copenhagenconsensus.com/Default.aspx?ID=755> (last visited Apr. 30, 2008) (“In particular we focus on the international community's effort to solve the world's biggest challenges and on how to do this in the most cost-efficient manner. The idea is simple, yet often neglected; when financial resources are limited, you need to prioritize the effort.”).

Dr. Lomborg's previous work in the environmental field includes *The Skeptical Environmentalist*,⁴ which to put it mildly was subject to harsh criticism for its overly cheerful assessment of an array of global environmental issues ranging from human health to natural resources to pollution to biodiversity to climate change. As but one example of the criticism heaped on Dr. Lomborg arising from *The Skeptical Environmentalist*, renowned biologist E.O. Wilson took Dr. Lomborg to task for his optimistic estimates of species extinction rates, and in a particularly harsh opening paragraph E.O. Wilson remarked:

My greatest regret about the Lomborg scam is the extraordinary amount of scientific talent that has to be expended to combat it in the media. We will always have contrarians like Lomborg whose sallies are characterized by willful ignorance, selective quotations, disregard for communication with genuine experts, and destructive campaigning to attract the attention of the media rather than scientists. They are the parasite load on scholars who earn success through the slow process of peer review and approval. The question is: How much load should be tolerated before a response is necessary? Lomborg is evidently over the threshold.⁵

Following his sunny assessment of the state of the world's environment in *The Skeptical Environmentalist*, Dr. Lomborg proceeds to offer a similarly cheerful view of climate change. He does not dispute that climate change is occurring, and Dr. Lomborg, unlike many climate change naysayers, readily admits that climate change is occurring as a result of human activity.⁶ He also readily acknowledges that "[i]t will have a serious impact on humans and the environment toward the end of this century."⁷

Nonetheless, despite the admission that climate change will have a perilous impact, according to Dr. Lomborg that position reflects the pessimist's "the glass is half empty" view of climate change. A substantial part of Dr. Lomborg's presentation in *Cool It* is the optimist's "the glass is half full" position that this latter view has been missing from the climate

4. BJØRN LOMBERG, *THE SKEPTICAL ENVIRONMENTALIST: MEASURING THE REAL STATE OF THE WORLD* (Hugh Matthews trans., Cambridge Univ. Press 2001) (1998) [hereinafter *SKEPTICAL ENVIRONMENTALIST*].

5. E.O. Wilson, *Vanishing Point: On Lomborg and Extinction*, *GRIST ENVTL. NEWS & COMMENTARY*, Dec. 12, 2001, <http://www.grist.org/advice/books/2001/12/12/point>.

6. *COOL IT*, *supra* note 2, at 8.

7. *Id.*

change debate and compels that we give serious consideration to the benefits attendant to a warmer planet.

As a starting point for his thesis in *Cool It*, Dr. Lomborg takes on those who focus on the negative impacts that climate change will have upon polar bears and their icy habitat. Dr. Lomborg, consistent with his cheerful focus on the positive aspects of climate change, does not accept the view that the melting Arctic region will result in the eventual extinction of the polar bear due to the loss of habitat. The stated purpose of this introductory exercise is to demonstrate the “vastly exaggerated and emotional claims”⁸ that appear in the media to hype the impact that climate change will likely have on the planet and its species. With respect to polar bears, Dr. Lomborg asserts that for forty years the number of polar bears has increased; and he rather cavalierly states that the melting ice does not foretell the impending doom of the species, but merely means that polar bears will “take up a lifestyle similar to that of brown bears, from which they evolved.”⁹ How long this will take and how many polar bears will perish during Dr. Lomborg’s predicted evolutionary journey towards the adaptation of brown bear behavior is not among the abundant statistics provided in *Cool It*.

Of course, those who have experienced life in the Arctic region and have studied the effects of climate change do not share Dr. Lomborg’s sunny prediction of an evolutionary alteration saving the polar bear from the effects of climate change. Not too long ago Paul Nicklen, a lifelong Arctic resident, for example, wrote about his observed changes in the region in *National Geographic Magazine*:

Scarcely ten years later, things have changed. The Poles are melting at an alarming rate; as warming grinds on, the possibility of an ice-free Arctic, at least during the summer, creeps closer each day. . . . Some scientists even believe the Arctic will be void of summer ice, dooming polar bears to extinction. This is one of the most disturbing predictions I’ve heard.¹⁰

Mr. Nicklen’s observations of the effect climate change is exacting on the Arctic is a far cry from Dr. Lomborg’s predicted polar bear adaptation through evolution.

With respect to other Arctic species, Dr. Lomborg simply asserts that the changing climate does not mean extinction of species, but an increase in

8. *Id.* at 6.

9. *Id.* at 6–7.

10. Paul Nicklen, *Life at the Edge*, NAT’L GEOGRAPHIC MAG., June 2007, at 32, 40.

species diversity and “higher ecosystem productivity,”¹¹ but what precisely this later phrase means is not clear. Yes, in response to changing weather patterns, different species likely will appear as new inhabitants in regions of the world where they were never found before. What happens, though, to existing species dependent upon a certain habitat that vanishes as a consequence of a hotter planet? Extinction, and perhaps mass extinction, is the troubling predicted answer to that question.¹²

What effects will climate change have upon the human species according to Dr. Lomborg? Here, too, we are not to worry. Why this lack of concern? Well, put simply, a warmer planet means fewer deaths.

Specifically, Dr. Lomborg claims that as a result of climate change the number of cold-related deaths will dramatically decline with no appreciable increase in heat-related deaths. Focusing on Europe, for instance, Dr. Lomborg claims that annually 200,000 people die from heat-related causes each year, but that roughly seven times as many—1.5 million—deaths are caused by the cold.¹³ Turn the planet thermostat up a few degrees and, as noted by Dr. Lomborg, the cold-related deaths decline drastically, which is a positive benefit of climate change that we must consider to fully appreciate the true impact of climate change:

How will heat and cold deaths change over the coming century? Let us for the moment assume—very unrealistically—that we will not adapt at all to the future heat. Still the biggest cold and heat study from Europe concludes that for an increase of 3.6 F, . . . any increases in mortality due to increased temperatures would be outweighed by much larger short-term declines in cold-related mortalities. For Britain, it is estimated that a 3.6 F increase will mean two thousand more heat deaths but twenty thousand fewer cold deaths.¹⁴

This short quote is reflective of one of the major difficulties with Dr. Lomborg’s approach to the subject of climate change and its purported benefits. Although he provides a lengthy seventy-seven page list of source notes and references at the end of *Cool It* to substantiate his assertions, it is

11. COOL IT, *supra* note 2, at 7.

12. See, e.g., Jay R. Malcom et al., *Global Warming and Extinctions of Endemic Species from Biodiversity Hotspots*, 20 CONSERVATION BIOLOGY 538, 544 (2006) (concluding that the effects of climate change could result in the loss of as many as 56,000 plant species and 3700 vertebrate species throughout the world).

13. COOL IT, *supra* note 2, at 17.

14. *Id.*

quite difficult to match the sources with the assertions. Thus, the multitude of statistics that Dr. Lomborg causally throws at the reader, such as those regarding the number of cold- and heat-related deaths in Europe, are practically impossible to verify. Verification is critical if one of his goals in writing the book was to get those interested in climate change to rethink their viewpoints concerning the challenges that climate change presents and the solutions that policy makers should consider.

His use of figures is also problematic because Dr. Lomborg is sloppy at best, and at worst, misleading with exactly what his numbers tend to support. He relies on figures to assert, for example, that heat deaths will not dramatically rise as a result of climate change. He fails to note, however, that the study he relies on to support that claim concludes that the offset in the number of warm weather deaths by fewer cold weather deaths will occur only over the *short term*. More important, with respect to climate change, is the question of what are the long-term implications of a 3.6 F or higher rise global temperatures? The answer to that critical question is not one that Dr. Lomborg specifically addresses in his discussion of heat-related deaths associated with climate change.

The brief heat wave that struck Chicago for several days in the summer of 1995 might prove instructive of what could occur as a result of increased, prolonged temperatures attendant to climate change in cities around the world. During the mid-1990s Chicago faced a heat wave with ambient temperatures during the day well into the 90s and on some days above 100 F. This period of intense warmth also coincided with a period of high humidity, so that the actual impact of the hot weather was even more acute. Based on data supplied by the Cook County Medical Examiner's office to the Centers for Disease Control and Prevention (CDC), the Chicago heat wave resulted in over 700 excess deaths and 485 deaths directly related to heat.¹⁵ Important for climate change impact is that in its analysis of heat-related deaths, the CDC arrived at the conclusion that "[h]eat-related morbidity and mortality could increase with periods of extreme heat."¹⁶

Based on the death toll that occurred in Chicago during the 1995 heat wave alone, the assertion by Dr. Lomborg that a decrease in cold weather deaths will offset the expected rise in heat-related deaths seems dubious, at least in the United States. Dr. Lomborg's claim is all the more questionable since, according to the CDC, the total annual cold weather deaths in the

15. Ctr. for Disease Control & Prevention, MMRW (Morbidity & Mortality Weekly Report), Heat-Related Deaths—Chicago, Illinois, 1996–2001, and United States, 1979–1999 (July 4, 2003), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5226a2.htm>.

16. *Id.*

entire United States is typically in the range of 700,¹⁷ which is fewer than the total excess heat deaths that occurred in Chicago during the 1995 heat wave and strongly suggests that Dr. Lomborg's predicted offset between heat-related and cold-related death is not a terribly likely scenario if the Earth reaches the predicted, unprecedented, and sustained warmer temperatures resulting from climate change.

Other aspects of his discussion regarding the effect of a warmer planet on human health also raise doubts. In the United States, he asserts that heat-related deaths in the largest cities have "dropped in general because of better health care."¹⁸ Perhaps that is true for those who are fortunate to have access to health insurance in the United States. But there are tens of millions of individuals without health insurance in the United States, most of whom are poor, unemployed, or the working poor whose employers do not provide health insurance as a benefit. They thus have limited or no access to this purported "better health care."

Additionally, Dr. Lomborg's view concerning access to better health care is a rather parochial one since it concerns only the United States. My guess is that billions of people in the world have limited or no access to health insurance, let alone actual health care. How will these people fare as the Earth's temperature rises and cities throughout the world become warmer? Again, the 1995 Chicago heat wave may prove highly illustrative of the fate many will face.

Another questionable aspect of *Cool It* is the position that we have and will continue to adapt to warmer temperatures and, in particular, the claim that "[o]ne of the main reasons for the lowered heat susceptibility is likely increased access to air conditioning."¹⁹ This is an especially ironic assertion since the increased need for air conditioning, both because warmer temperatures will strike sooner and result in longer, hotter summers, will result in increased electricity demands, much of it supplied by coal-fired power plants. This will lead to increased emissions of the main heat trapping gas, carbon dioxide, with associated increases in other pollutants as well, which will further increase global temperatures. Dr. Lomborg apparently fails to see the irony of this specific position. But there is still no need to worry about higher urban temperatures, because an "almost comically straightforward"²⁰ solution is readily available: we can simply, as he points out toward the end of his discussion of temperature-

17. Ctr. for Disease Control & Prevention, *Fact Sheet: Hypothermia-Related Deaths—United States, 2003–2004* (Feb. 24, 2005), available at <http://www.cdc.gov/od/oc/media/pressrel/fs050224.htm>.

18. *COOL IT*, *supra* note 2, at 18.

19. *Id.*

20. *Id.* at 21.

related deaths, using Los Angeles as an example, reflect heat with light colored pavement and roofs and plant millions of trees.²¹ These steps, according to Dr. Lomborg, will provide a host of financial benefits and, importantly, lower temperatures by 5°F, which is the estimated rise expected as a result of climate change.²² Ah, if the answers to climate change were only as simple as painting the town white!

Since his approach to climate change relies heavily on cost-benefit analysis, a substantial portion of *Cool It* focuses on the costs of complying with the carbon reduction requirements of the Kyoto Protocol, which he believes are vastly disproportionate to the meager human health benefits that will occur as a result of reducing global carbon emissions. In his view, the funds necessary to achieve compliance with the Kyoto Protocol's very modest carbon reduction goals are by far better spent, and will have a far greater positive impact on humanity, on current scourges such as AIDS, malnutrition, malaria, and contaminated drinking water.²³ Surely addressing these issues through well-funded, effective programs would result in enormous global societal benefit. To focus on these issues, however, to the near exclusion of climate change, misses the mark because Dr. Lomborg does not adequately confront the fact of the widely anticipated exacerbation that will occur with the problems he believes we should devote most resources to in lieu of combating climate change through aggressively reducing carbon emissions.

According to the *Fourth Assessment Report* of the Intergovernmental Panel on Climate Change, it is "very likely" that the effect climate change will have on human health includes an increased risk of infectious diseases.²⁴ Consider higher rates of infectious diseases, coupled with the regional anticipated effects of climate change, such as less water for between 75 and 250 million Africans, with an associated potential decrease of 50% in crop yields, and with a similar scenario expected in Latin America in terms of reduced food production, and one can only conclude that the human health toll around the world, particularly in the developing world, will be dramatic.²⁵ It is simply common sense that the anticipated negative consequences that climate change will have on food production worldwide will significantly exacerbate the current health problems that Dr.

21. *Id.*

22. *Id.*

23. *Id.* at 41–52, 164.

24. U.N. Env't Programme and World Meteorological Org., Intergovernmental Panel on Climate Change, *IPCC Fourth Assessment Report, Climate Change 2007: Synthesis Report (Summary for Policymakers)* 13 tbl.SPM.3 (2007), available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf.

25. *Id.* at 11–12 tbl.SPM.2.

Lomborg believes we should focus on to the virtual exclusion of major reductions in carbon emissions.

But here too, Dr. Lomborg counsels readers that there is little need to worry about the predicted ravages of climate change upon humanity, particularly in developing countries. This may seem counterintuitive, since one can reasonably surmise that the poorer countries of the world are likely to face the greatest adverse consequences of climate change. Dr. Lomborg notes, based on an unclear source, that at the turn of this century

when many of warming's problems will be felt in earnest, the average person in the developing world is expected to make about one hundred thousand dollars (in present value) each year. . . . [T]he average person in the third world will be as rich as a present-day Portuguese or Greek or richer than most West Europeans in 1980. Much more likely, he or she will be richer than today's average American, Dane, or Australian. This richness will of course enable these countries to better handle outside shocks, whether they come from climate change or any of the other major challenges the future undoubtedly will deal us.²⁶

There are several difficulties with his assertion that we can, therefore, simply spend our way out of the harsh effects that scientists anticipate will occur as a result of climate change. First, it is not clear where or how he arrived at the astronomical economic growth that he predicts will occur in developing countries. An associated difficulty is that it is far from clear which are the specific "developing countries" that will, over the course of less than a century, become economic powers on par with 1980 Western Europe. Second, based on current evidence, in most impoverished countries Dr. Lomborg's predicted climb out of poverty does not appear likely by the end of this century.

Yes, rapid, unprecedented economic growth is occurring in China and India, but is the same occurring in Sub-Saharan Africa or in Haiti? I do not believe anyone can make a credible case that those regions of the world are on the sound path of economic development on scale predicted by Dr. Lomborg. Third, even if he is correct that incomes in developing countries will soar to the astronomical levels he cites, will not a corresponding dramatic rise in the price of basic life necessities also occur, so that only marginal reductions in poverty will have occurred in the developing countries he references? Fourth, will not such new found wealth also result

26. COOL IT, *supra* note 2, at 48.

in behavior that further contributes to substantial increases in worldwide carbon emissions due to the purchases of middle class necessities, including automobiles, air conditioning, and other appliances powered by fossil fuels? Finally, rather than using this burgeoning new-found worldwide wealth to adapt to the harmful effects of climate change, it would seem to make more sense to consider this increased income in the true cost of taking aggressive action to reduce carbon emissions. This Dr. Lomborg does not do in his rushed conclusion that compliance with the Kyoto Protocol is too expensive.

Flooding, another anticipated negative consequence of climate change, he addresses in similar fashion. All we need to do throughout the world to protect populations susceptible to the ravages of flooding caused by rising sea levels, according to Dr. Lomborg, is to build barriers, dikes, and levees. "If we invest smartly," he writes, "we will essentially have no people flooded by 2085, simply because we are richer and can afford greater protection."²⁷ As I recall, this exact proposed solution—the construction of barriers, dikes, and levees—was supposed to protect low-lying New Orleans from the waters of the Mississippi River, various and sundry canals, and the Gulf of Mexico. We are, of course, acutely aware of the havoc that Hurricane Katrina wreaked upon the Crescent City the day that the levees failed. Nonetheless, despite the enormous costs associated with such constructed barriers and the fact that a certain number will undoubtedly fail over time, or simply prove ineffective, Dr. Lomborg advocates for their widespread use on a global basis as the answer to rising sea levels.

In the end, the cost-benefit arguments set forth in *Cool It* are best summarized as curiously contradictory. That is, regarding the costs associated with climate change, Dr. Lomborg cannot have it both ways. On the one hand, the modest carbon reductions that the Kyoto Protocol mandates are too expensive; but on the other hand, as global incomes rise, even developing countries will have the financial wherewithal necessary to adapt and combat the range of negative consequences brought to bear by a hotter planet. I find this financial sleight of hand by Dr. Lomborg simply unpersuasive.

While pitched on the inside cover as a "groundbreaking book," *Cool It* is far from a revolutionary work. Much of what is presented in *Cool It* is in actuality a repackaging of the views on climate change presented several years earlier by Dr. Lomborg in *The Skeptical Environmentalist*. In that Pollyanna perspective of the state of the global environment, he presented

27. *Id.* at 68.

many of the same arguments that underlie much of *Cool It*. In *The Skeptical Environmentalist*, Dr. Lomborg concluded his discussion on climate change by stating that “[g]lobal warming will not decrease food production, it will not probably increase storminess or the frequency of hurricanes, it will not increase the impact of malaria or cause more deaths,” nor will it result in catastrophic floods.²⁸ Why not? Because, of course, “a much richer world will protect itself better.”²⁹

If that refrain is a very familiar one, it is because the sum and substance of the *The Skeptical Environmentalist*'s primary argument has been merely repackaged and updated in Dr. Lomborg's latest book, *Cool It*. One is only left to surmise that Dr. Lomborg cooked up what amounts to a leftover, already-served meal of a book, not in an effort to educate and add to the serious debate concerning what steps to take to effectively address what is perhaps one of the greatest challenges facing humanity, but as a cynical effort to capitalize on the attention climate change is receiving by selling a not particularly compelling book.

28. SKEPTICAL ENVIRONMENTALIST, *supra* note 4, at 317.

29. *Id.*