

A New Dawn

The benefits of climate-change policies are limited and costly. Instead, the president-elect needs to coolly evaluate competing priorities, says Bjørn Lomborg.

By BJØRN LOMBORG

Most generations face large and daunting challenges. But few generations have the promise of leadership that could address them rationally. Fortunately, President-elect Obama is uniquely positioned to achieve such a feat and help the world solve some of its most entrenched issues.

He will be swamped with suggestions as to what to do first -- perhaps none more impassioned than those who advocate dealing with man-made climate change. He will be told that it is the biggest threat facing humanity and that its solution is the mission of our generation. In many quarters, global warming is now positioned as a kind of uber-issue: a challenge of such enormity that it trumps all others.

Science and economics say otherwise. The United Nations science consensus expects temperature increases of 3 to 7 degrees Fahrenheit by the end of the century, leading to (for example) sea-level increases of between one-half and two feet. Yet such a rise is entirely manageable and not dissimilar to the sea-level rise of about one foot we dealt with over the past 150 years. And while warming will mean about 400,000 more heat-related deaths globally, it will also have positive effects, such as 1.8 million fewer cold-related deaths, according to the only peer-reviewed global estimate, published in *Ecological Economics* -- something that is rarely reported.

Most economic models show that the total damage by the end of the century will be about 3% of global GDP -- not trivial but certainly not the end of the world. Remember that the U.N. expects that by the end of the century the average person in the world will be some 1,400% richer.

And yet, macro policy-making such as the Kyoto Protocol has been supported by an ill-founded perception of impending doom. The framers of Kyoto will ask that the global economy spend \$180 billion per year for each year of the coming century mitigating CO₂ emissions, with an eventual reduction of global temperature of an almost immeasurable 0.3 degrees Fahrenheit. It is perhaps time to ask if this can really be our first priority and generational mission.

This would not matter if we had infinite resources, and if we'd already solved all or most other problems.

But we don't, and we haven't. Especially in the current economic climate, we have to prioritize what we do -- we have to coolly look at the costs and benefits of policies.

If we don't do this, we in the developed world will preside over a moral tragedy: We will waste an extraordinary sum of money doing relatively little good, while millions of people suffer and die from problems which we could easily have consigned to history.

Take hunger. Impassioned pleas for climate action are based on the fact that agricultural production might decrease because of global warming, especially in the developing world. But again, we need context. Integrated models show that even with the most pessimistic assumptions, global warming would see a reduction in global agricultural production by the end of the century of 1.4%. Since agricultural output is expected to more than double

over the same period, this means that climate change will cause the world's food production to double not in 2080 but in 2081.

Global warming will probably in isolation cause the number of malnourished to increase by 28 million by the end of the century. Yet the much more important point is that the world hosts more than 900 million malnourished right now; though we will add at least three billion more people to humanity before the end of the century, the total number of malnourished in 2100 will probably drop to about 100 million. And in a much richer world, such remaining hunger is entirely a consequence of a lack of political will.

Crucially, focusing on tackling hunger through climate change policy is amazingly inefficient. Implementing Kyoto at \$180 billion annually, we would avoid two million hungry by the end of the century. Yet spending just \$10 billion annually, the U.N. estimates we could save 229 million people from hunger today.

Whatever is spent on climate policies saving one person from hunger in 100 years could instead save 5,000 people today.

This same point is true, whether we look at flooding, heat waves, hurricanes, diseases or water shortages. Carbon cuts are an ineffective response. Direct policies -- such as addressing hunger directly -- do a lot more.

Some say we just need to go much farther in cutting carbon. But more of a poor solution doesn't make it better. Even if we could completely stop climate change through carbon cuts (an utterly unrealistic proposal), 97% of the hunger problem would remain, because only 3% of it will be caused by global warming.

More generally, since climate change mainly exacerbates many of the world's existing problems, reducing emissions will only do marginal good. If global warming is the proverbial straw that will break the camel's back, spending huge sums on removing the straw is a poor strategy compared to reducing the camel's excess base load at much lower cost.

Mr. Obama has promised both an ambitious climate strategy investing \$150 billion in new technologies and a doubling of foreign assistance to \$50 billion. With a teetering U.S. economy, he has indicated that he may have to scale back the \$150 billion investment. The Vice President-elect has clearly said that the doubling of aid might have to be postponed.

Now more than ever, there needs to be trade-offs between competing priorities. His foreign aid should focus on areas like direct malnutrition policies, immunization and agricultural research and development.

These would be some of the best investments possible. Why? This year a team of the world's top economists, including five Nobel Laureates, identified the very best investments in improving the world in a process called the Copenhagen Consensus. They found that if Mr. Obama's increased foreign development spending was focused on these areas, it could achieve 15 to 25 times more good than the cost.

We should also deal with climate change, but in a smarter way.

Kyoto shows what not to do. In 1997, politicians made lofty promises, which were to be fulfilled in the future. Well, the future has arrived and most countries did not want to pay enough -- not just the United States, but the European Union, Japan and Canada.

Making even grander pledges at the next negotiation in Copenhagen in 2009 will likely just waste another decade. Mr. Obama's undertaking to spend \$150 billion over the next decade on clean technology could make a huge difference.

In climate change, the Copenhagen Consensus experts found that research and development of low-carbon energy technologies could do 11 times more good than the cost, whereas simple CO₂ cuts produce a disappointing 90-cent return on the dollar.

Amazing good could come from using Mr. Obama's \$150 billion primarily to invest in creating new technologies, rather than simply subsidizing existing ones.

Investing in existing inefficient technology (like current-day solar panels) costs a lot for little benefit. Germany, the leading consumer of solar panels, will end up spending \$156 billion by 2035, yet only delay global warming by one hour by the end of the century.

If Mr. Obama invested instead in low-carbon research and development, the dollars would go far (researchers are relatively cheap), and the result -- maybe by 2040 -- will be better solar panels that are cheaper than fossil fuels. Complex Kyoto-style political negotiations would become unnecessary because everyone, including China and India, will want to switch. The change will come because in large part Mr. Obama's \$150 billion will have made the technologies cheaper. Following Mr. Obama's lead, countries should agree to spend 0.05% of their GDP on energy R&D -- increasing the global R&D ten-fold, yet costing 10 times less than Kyoto. This could realistically and cost-effectively fix global warming in the medium term.

Harnessing the immense intellectual and scientific capital of the great nation of the United States to help solve the problems of the world in a rationally and morally defensible way is our true generational mission.

It will require true leadership, and the courage to fly in the face of much popular opinion -- traits Mr. Obama has already exhibited in great measure.

Change is definitely needed. Focusing on investment in malnutrition and disease could do immense good at low cost, brandishing a world where healthier and stronger humans can take charge of their own lives and deal better with the many challenges of the future.

Global warming also needs strong leadership. Avoiding the lost decades and misused resources of a Kyoto approach would be paramount, and a focus on 0.05% of GDP R&D would fix long-term global warming at much lower cost and with much higher probability of success. This, truly, would be change we could believe in.

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