

Approaches embodied in the Asia Pacific Partnership
By Bjørn Lomborg

Global warming has become one of the preeminent concerns of our time, and this often clouds our judgment and makes us suggest inefficient remedies. As a result, we risk losing sight of tackling the most important global issues first, as well as missing the best long-term approach to global warming.

Yes, global warming is real, and it is caused mainly by CO₂ from fossil fuels. The total cost of global warming is \$5-8 trillion, which ought to make us think hard about how to address it.

However, the best climate models show that immediate action will do little good. The Kyoto Protocol will cut CO₂ emissions from industrialized countries by 30% below what it would have been in 2010 and by 50% in 2050. Yet, even if everyone (including the United States) lived up to the protocol's rules, and stuck to it throughout the century, the change would be almost immeasurable, postponing warming for just six years in 2100.

Likewise, economic models tell us that the cost would be substantial – at least \$150 billion a year. In comparison, the United Nations estimates that half that amount could permanently solve all of the world's major problems: it could ensure clean drinking water, sanitation, basic health care, and education for every single person in the world, now.

Global warming will mainly harm developing countries, because they are more exposed and poorer and therefore more vulnerable to the effects of climate change. However, even the most pessimistic forecasts from the UN project that by 2100 the average person in developing countries will be richer than the average person in developed countries is now.

So early action on global warming is basically a costly way of doing very little for much richer people far into the future. We need to ask ourselves if this should, in fact, be our first priority.

Two Copenhagen Consensus priority setting roundtables, with some of the world's top economists and the top UN ambassadors similarly found that Kyoto comes far down the list of global priorities (see attached priorities).

This does not mean doing nothing, but doing the clean, clever and competitive thing. Climate change should be addressed where effect is high and costs limited. Such an example is the “Asia-Pacific Partnership”, which focuses on energy efficiency and diffusion of advanced technologies in electricity, transport and key industry sectors. Because it focuses on some of this century's biggest emitters, including China, India and the US, it is forecast to reduce global carbon emissions with 11% in 2050– for reference, a full Kyoto would only reduce emissions by 9% in 2050.

In essence, the AP6 is picking up the smart, low-hanging fruits; good examples would include the many Chinese coal plants that have heat rate efficiencies around 25%, compared to U.S. coal plants, which have efficiencies of 33-36%. The U.S. has a lot of expertise in retrofits and improving the efficiency of coal plants in China would not only reduce fuel inputs and air pollution, but CO₂ as well.

The cost of the AP6, however, is unclear at the moment. It is seen as cheap and voluntary, but it is doubtful that entirely voluntary measures will achieve all of the AP6 potential. And certainly, in the long run, more clever measures will be needed.

For the future after 2012 we need not to propose more Kyoto-style immediate cuts, which would be prohibitively expensive, do little good, and cause many nations to abandon the entire process. We should rather be focusing on investments in making energy without CO₂ emissions viable for our descendants. This would be much cheaper and ultimately much more effective in dealing with global warming. I would suggest a treaty binding every nation to spend, say, 0.05% of GDP on research, development and demonstration of non-carbon-emitting energy technologies. This would, worldwide provide some \$25 billion in RD&D – an almost 25-fold increase.

This approach would be five times cheaper than Kyoto and many more times cheaper than a potential Kyoto II. It would involve all nations, with richer nations naturally paying the larger share. Perhaps developing nations should be phased in or mechanisms put in place to assist them financially and technically as in the AP6. It would let each country focus on its own future vision of addressing the energy and climate change challenge, whether that means concentrating on renewables, fission, fusion, conservation, carbon storage, or searching for new and more exotic opportunities.

Such a massive global research effort would also have potentially huge innovation spin-offs. In the long run, such actions are likely to make a much greater impact than Kyoto-style responses. Researches at Berkeley actually envision that such a level of R&D could solve global warming in the medium term.

In a world with limited resources, where we struggle to solve just some of the challenges that we face, caring more about some issues means caring less about others. We have a moral obligation to do the most good that we possibly can with what we spend, so we must focus our resources where we can accomplish the most first.

Rather than investing hundreds of billions of dollars in short-term, ineffective cuts in CO₂ emissions, we should be investing tens of billions in research, leaving our children and grandchildren with cheaper and cleaner energy options.

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