## CARBON MARKET INSIDER

# **Don't Invest in Current Clean Energy, Back Future Technology**



Danish academic Bjorn Lomborg stirred controversy in 2001 with his book "The Skeptical Environmentalist," which downplayed the effects of climate change on the planet and called "radical" fossil fuel cutbacks "way worse" than global warming. In his 2007 book, "Cool It," he admits rising temperatures due to man-made emissions "will have a serious impact" toward the end of this century. He is now the director of the Copenhagen Consensus Centre, which may close this year after the Danish government withdrew funding. Lomborg tells Siobhan Wagner of Bloomberg New Energy Finance there is too much focus on cutting carbon-dioxide and clean-tech subsidy funds would be better spent on research and development.

#### Q: You have referred to past United Nations' climate negotiations as a "two-decade history of flogging a dead horse." What alternative do you propose?

A: The reason why the climate negotiations are failing is because you are essentially asking a very large number of nations to cut back on the emissions that result from the power use that makes them rich. That's a very hard ask. I definitely agree you need international cooperation to tackle global warming, but what the economic analysis shows is that instead of focusing on cutting carbon emissions (which is always going to be very expensive and only help a little in a very long time from now) you should be focusing on increasing research and development in green energy globally. The next global deal in Rio should be about promising to spend more money, much more money on green R&D. If we can make green energy sources cheaper than fossil fuel, we will solve the global warming problem. Everyone would switch so we wouldn't need these arduous and unsuccessful global negotiations. So the beauty is spend much less money, but spend it much smarter through an international agreement of ramping up global spending to 0.2 percent of GDP. If we could get every nation to say we are going to spend 0.2 percent of our GDP on research and development into green energy research we could probably solve global warming by mid-century and it would do much more good and it would have a much greater chance of actually succeeding.

#### Q: Why do you say there's no use in subsidizing today's clean energy technology?

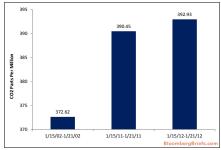
A: Really all we can do with current subsidies is subsidize inefficient technologies that suck out the life blood of this space and eventually turn people against green energy as we've seen very clearly in the German case for subsidizing solar panels. Now people are putting up so many that they have to cut back subsidies dramatically because it's actually affecting the German economy. You end up with a situation where you have huge amounts of money spent on things that will do virtually no good. One of my favorite calculations is: the Germans have spent more than 100 billion euros, about \$130 billion, on subsidies on solar panels. Their net effect will be to postpone global warming by the end of the century by 23 hours.

### Q: What clean energy technologies should we be investing in?

A: Well the point is don't invest in subsidizing existing technologies, invest in future technologies. We should be investing in all of these areas because we don't know which of these technologies is going to breakthrough first. Wind looks like it's the closest but then it may very well be other and much more exciting technologies that will have much broader possibilities for scale and cost production in the long run. The trick here is spend money efficiently. Spend it where it's cheap; that is researchers, and then you can actually afford to spend on a vast number of different proposals, most of which are going to fail but that's OK because the ones that are going to succeed are the ones that will power the rest of the 21st century.

#### **CO2 IN ATMOSPHERE**

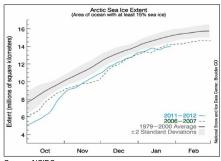
Carbon dioxide concentration levels are increasing at an accelerating rate decade to decade. Scientists say returning to an atmospheric carbon dioxide concentration below 350 parts per million is needed to avoid climate change.



Source: NOAA/ESRL

### **ARCTIC SEA ICE**

The summer sea ice melt season ended in the Northern Hemisphere in September. This graph compares the daily sea ice extent for the year until Jan. 28 with the 1979 to 2000 average and the year with record low ice extend, 2007.



Source: NSIDC

### **GLOSSARY**

■ Metric Tons of CO2 Equivalent

Measure used to compare emissions from various greenhouse gases based on their global warming potential.

Kilowatt-Hour

Measure of electricity used equal to 1kW of power spent for one hour of work.

WHERE ARE CARBON PRICES GOING?

