

## **Comment by Till Requate on Scott Barrett: “Rethinking Global Climate Change Governance”**

The paper by Scott Barrett offers a merciless analysis of both current climate policy and reasons by the Kyoto protocol failed and had to fail. While Barrett’s analysis about failure of the Kyoto Protocol is done in a brilliant way, the last part where he gives directions to solve the problem remains a bit vague. He stays almost silent about incentives for dissemination and adoption of new technology, and he does not say anything about cost. In this light the paper is more a political than an economic paper.

Some more comments in detail:

Barrett argues that hot air is bad since it increases total emissions. However this need not be the case. If, in order to make some country B, say, to participate in an international agreement, some country A gives up some of its initial endowment and passes it to B, this does neither affect the total target nor efficiency even if country B ends up with an initial endowment that exceeds the business-as-usual emissions. I would even argue that some hot air for China and India could have saved the Kyoto-Protocol. It’s just a shift of wealth from the rich to the poor, which is nothing bad as long as the total target is a real reduction of emissions.

Barrett argues in favor of basic R&D with respect to technologies that can easily be disseminated. However, there is few economics in Barrett’s considerations. Barrett keeps silent about both, a cost efficiency analysis, and about how to set economic incentives. What mechanism is supposed to pick the most cost effective technologies? And what incentive scheme can spur economic agents to adopt advanced, CO<sub>2</sub> free technology in presence of other cheap energy, notably coal? Barrett also gives almost no example what these technologies could be. Let me mention some examples that show the controversy: In Europe there exist at least two opinions among “green thinkers” what path to go. Some, for example Jacqueline McGlade, the executive director of the European Environmental Agency (Copenhagen, Denmark) argues in favor of purely decentralized energy procurement: Big power plants have to be abolished. Households have to produce their own electricity by photovoltaic, combined power and heat generation, and so on. Other researchers, in particular climate physicists argue that large solar-thermo power plants should be built in countries of Northern African to produce electricity and then to be transmitted to all over Europe. Who is right? An economist would say, the market should decide. For this we need to set the right incentives, such as cap and trade. If there is no market mechanism, but governments decide by setting particular standards, as Barrett suggests, the result can be disastrous. Since climate production is expensive, we should not waste resources by using the wrong technologies. To prove that governments subsidize the wrong technologies, we need only have a look at different European countries, in particular Germany, where differentiated feed-in tariffs are paid for electricity generated from different kinds of renewable resources: 7-9 cents for one kilowatt hour of electricity generated from wind power, about 60 cents for photovoltaic. If we look at the marginal abatement cost of avoiding CO<sub>2</sub>, we see that currently by using “traditional” measures, such as fuel switch and efficiency improvements, industry pays 25 € marginal abatement costs per ton CO<sub>2</sub> (which you can read from the market price for tradable permits), while using wind energy costs 100€ per ton, and by using photovoltaic it costs 1000€ to avoid one ton of CO<sub>2</sub> (Numbers calculated by IEA). The German government (and others)

completely ignores these cost differences. These examples show that we cannot trust government decision with respect to setting technological standards.

To me it sounds as if arguing for more R&D is a cheap excuse for not telling people the truth, that climate policy is costly. New technologies have to be developed, but without the price instrument for emissions there is no incentive to adopt them.

Let me also mention that Barrett's main message, to engage more in R&D and to enforce the dissemination by setting standards is in sharp contrast to a recent study by Caroline Fisher and Richard Newell from RFF (published in JEEM 2008, and as short version in *Resources*), who calculate R&D subsidies to be the most expensive instrument to reduce emissions. By contrast Fisher and Newell stress that prices for emissions is the most effective and cost efficient way for climate protection.