FIVE QUESTIONS

ON CO_2 EMISSIONS COMPENSATION

FOR BENEDICT PROBST

Mr. Probst, are measures for CO_2 emissions compensation – such as constructing wind farms, protecting forests, practicing more climate-friendly forestry, or producing low-CO_2 cooking stoves for the countries in the Global South – sensible?

BENEDICT PROBST: In and of themselves, the measures are sensible. However, the compensation certificates issued for them result in virtually no additional climate protection. For example, it is beneficial for the climate when wind farms are built in China. However, it is not good when people maintain that these wind farms could only be financed by selling the certificates. The studies that we have analyzed show that certificate sales play absolutely no role in decisions regarding wind farm financing.

What are the problems with certification?

We have evaluated 14 studies on 2346 CO_2 reduction projects. On average, they conserve less than 16 percent of the greenhouse gases indicated by the project developers. These low figures harbor several problems: selling certificates resulted in no additional CO_2 reductions for many projects. This was the case for wind energy projects in China, since they would have been implemented regardless. Furthermore, many project developers calculate reductions using methods that are not based on the latest scientific developments. And then there are also the misplaced incentives in the methodological structure of the programs. For instance, measures to improve forest management in the USA often include areas in which there has already been a reduction in timber extraction for some time prior to the introduction of the measures. But the reductions are calculated in comparison with a regional average that assumes a higher rate of wood removal. That means they are grossly overestimated.

Can compensating for CO_2 emissions nonetheless contribute to climate protection?

Residual emissions from the industrial and transport sectors that are virtually impossible to avoid must be compensated for in the long term. However, this can only be achieved through permanent removal methods such as direct air capture and storage, i.e., the removal of CO_2 from the air, or by storing CO_2 that is produced when biomass is burned. These certificates are very expensive, but they will become less expensive once the technology has developed further, and such procedures are used on a large scale. There are company consortia like Frontier that purchase expensive certificates for permanent compensation, for example, but they account for only a small portion of the market to date.

How is CO_2 priced, apart from the compensation certificates?

On the one hand, there are CO_2 taxes, where people pay a fixed sum per metric ton, and on the other there is emissions trading. Typically, in emissions trading, an emissions budget is stipulated for industrial facilities in Europe. For part of this budget, companies are granted pollution rights, which they can trade. The upper limit is lowered each year, with the result that the price and pressure for companies to reduce CO_2 increase. Some fear that companies will purchase compensation certificates and thereby subvert emissions trading. However, that has occurred only to a minor extent thus far.

How can private individuals compensate for CO_2 emissions, such as for flights?

We need to dispel the myth that we can pay small amounts to compensate for flights. Fossil fuel emissions remain in the atmosphere for thousands of years and require long-term removal measures for compensation. Common approaches like forest conservation are not enough, since their effects are quickly nullified by forest loss, such as through fires. However, certificates from permanent removal methods like direct air capture and storage can be purchased, such as the ones offered by the Swiss company Climeworks. Since they are very expensive, however, hardly anyone can completely compensate for their emissions with these certificates. Nonetheless, people contribute to the further development of these technologies through their purchases.

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