How Clean is CDM?

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The Clean Development Mechanism (CDM) is advocated to improve on the efficiency of a climate policy. Allowing donor countries to import CDM credits, can substantially lower their costs of abatement. The CDM credits lead to financial transfers to hosting countries, which will lower the carbon-intensity of production in host countries. Moreover, the CDM credits will be sold at the marginal price of abatement lying above the average price of abatement. Therefore hosting countries will gain from selling credits. But as these countries do not have a national ceiling, the gains might provoke new energy-intensive production that offsets the ex-ante decline of carbon emissions. This argument especially holds in cases in which the gains are targeted to lower electricity prices in host countries. Also, new energy-intensive activities may be further boosted due to local fossil energy markets. This paper shows that in the post-Kyoto era, if there are no restrictions on CDM, projects could be sold at 20 €/t CO_2, or higher. In energy exporting host countries this could lead to more than 60 percent leakage effect of the intended emission reduction. CDM will promote development and lowers the costs of abatement in donor countries, but also provokes dirty production offsetting its supposedly environmental clean-up, thus undermining the overall effectiveness of the instrument.

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