

Are International Carbon Offsets Innately Flawed and Unreformable?

International trading of carbon credits is approaching a decisive threshold. In 2020, the Kyoto Protocol greenhouse gas emission reduction targets for richer countries will be replaced by the voluntary commitments undertaken by almost all countries in the 2015 Paris climate agreement. Article 6 of the agreement provides for international trading in “mitigation outcomes” and a “mechanism” to facilitate this. The details remain to be worked out.

Meanwhile, the European Commission asked the German *Oko* Institute to evaluate the principal global carbon trading entity of the protocol, the Clean Development Mechanism. The findings are devastating.

The CDM allowed the richer developed countries to meet part of their Kyoto targets by financing less expensive reductions in developing countries. The CDM has approved over 1.8 billion so-called Certified Emission Reductions associated with nearly 8,000 projects. Each CER supposedly represents a one metric ton reduction of CO₂ or equivalent in global GHG emissions. The potential CER supply for CDM projects through 2020 is over 8.8 billion — about equal to the total annual emissions of the EU (including the UK), India, Japan, and Russia.

Oko examined registered CDM projects and potential CER issuance for the period 2013–20. Do CDM projects produce additional reductions as opposed to business as usual? The analysis found that only 2 percent of CDM projects, and 7 percent of the potential CERs, have a high likelihood of such environmental integrity. Eighty-five percent of the CDM projects and 73 percent of the potential CER supply have a low likelihood that these offsets will represent additional reductions.

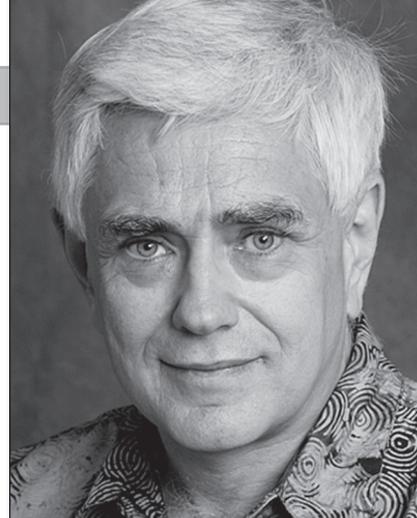
The study concluded that for important CDM project categories the lack of environmental integrity is inherent, not merely a question of improving monitoring or procedures. For example, carbon offsets to promote wind, hydro, waste heat recovery, switching from coal to gas, and efficient lighting are unlikely to produce any net climate benefits. For “these project types . . . revenue from the CDM is small compared to the investment costs and other . . . revenue streams, even if the CER prices would be much higher than today.”

The study identifies inherently contradictory incentives in international carbon offset trading that undermine attempts at reform: “Information asymmetry between project developers and regulators” — the developers have a big advantage in gaming the system — “combined with economic incentives for project developers to have their project recognized as additional, are a major challenge.”

Host governments can be perversely incentivized “not to implement domestic policies to address emissions” rather than lose prospective revenue from CERs.

Even for projects likely to result in reduced emissions, the CDM and other carbon offset mechanisms act as a subsidy to lower the cost of activities that nevertheless increase emissions overall (for example energy and cement production and transportation services). This “rebound effect” results in greater growth in these activities than otherwise would have been the case.

The study found that over the CDM’s more than decade and a half history, its performance steadily declined. Pressures of governments and developers to simplify or debase its procedures undermined environmental integrity, adding project lists for



Bruce Rich, an ELI Visiting Scholar, is an attorney and author who has served as senior counsel to major environmental organizations. E: brucemrich@gmail.com.

technologies whose “additionality is questionable.” Moreover, the entire CDM portfolio has progressively shifted “toward projects with questionable additionality.” In 2007, two thirds of the portfolio consisted of projects that depended principally on CERs for revenue — ensuring that they would indeed be additional, and would not have been funded by business as usual. In the 2013–20 portfolio, over three quarters of potential CERs will go for activities for which CER revenue is minor or marginal.

Finally, the CDM and other offset programs have produced a chronic oversupply of credits, which grows worse because of decreasing demand. The EU has no plans to credit international carbon offsets after 2020.

These findings are “largely relevant and valid” for other international carbon crediting and offsetting mechanisms, including globally used protocols like the Verified Carbon Standard and Gold Standard. These two carbon reduction registries account for most voluntary carbon offsetting projects worldwide promoted by companies and non-profit organizations. The study is also relevant for proposed international offset systems for airplane and ship emissions.

The *Oko* Institute concludes that carbon “crediting should not be further pursued as a main tool for GHG mitigation.” The emphasis should be on carbon pricing through taxes and “bounded” emissions trading, without international offsets.