The Voluntary Carbon Market - Why it is broken and how to fix it

Vittoria Battocletti, Luca Enriques and Alessandro Romano

An increasing number of companies are setting “net-zero” climate targets. Carbon offsets are a key component of most of these net zero targets. We analyze the voluntary market for carbon offsets and identify the market failures by which it is characterized and that are likely to lead to a significant degree of greenwashing. This suggests that most of net zero targets are unreliable, at least for this crucial component. Further, we suggest a policy that could improve the functioning of the market.

The process of creating a carbon offset starts with a project developer, who is a person or organization that develops an emission reduction project. The project developer will generally have its emission reduction certified by one of the main standard setters (e.g., Verra and the Gold Standard). In turn, standard setters rely on validation and verification bodies (VVB) to audit the project and ensure that it meets the quality requirements that they impose. The problem lies in the fact that the incentives of the project developer, the VVB and their customers (the firms requesting for the carbon-offset services), if not even some of those who make purchase or investment decisions based on firms’ net zero targets push in the direction of having a higher number of units of carbon emissions certified than rigorous methodologies would account for. The paper explores the reasons why players’ incentives are skewed towards certification of inflated offsets, including the use of the familiar “issuer pays model” and the information asymmetries preventing investors and consumers from second-guessing the relevant players’ estimates.

Fixing this market is no easy task. On the one hand, it is a voluntary market, and hence any invasive regulation might lead most participants to drop out. And since carbon offsets can do some good, this result is certainly undesirable. On the other hand, the science underlying carbon offsets is objectively complex, and policymakers lack sufficient information for imposing a standardized methodology.

Against, this background, we suggest a policy in which the only role played by the policymakers is favoring the creation of a mechanism of private enforcement driven by NGOs with an interest in environmental protection. In particular, the policymaker should create a platform on which project developers issuing certified carbon offsets should post: a) the names of the standard setter and the VVB who certified the project, b) the emissions credited, c) the methodologies adopted, d) other co-benefits associated with the project (e.g., increasing biodiversity), and e) any additional information required to check the analysis carried out by the VVB and the standard. Standard setters already report this information; therefore, it would be easy for them to comply. However, currently each standard setter presents information in a different manner, making comparisons extremely complex. On the contrary, information on the platform should be presented in a standard format.

Like anyone else, NGOs would have access to all the information on the platform and could act as bounty killers, searching for instances of inflated carbon offsets. The paper describes the mechanisms that could be used to let NGOs perform that role and the effects of a finding of carbon offsets inflation.

A crucial issue is who bears the costs of this mechanism of private enforcement. To avoid hindering the growth of the market, we suggest that the costs should be borne by governments and by the large corporations that buy offsets (e.g., carbon majors). The latter, were they able to coordinate, would have the interest to contribute as it would allow them to credibly signal that they have an interest in purchasing reliable offsets, given that they would subsidize NGOs hunting for poor quality offsets.