Cap & Trade systems are not a feasible way to restore carbon markets credibility

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Voluntary carbon markets (VCMs) face critical issues that undermine their credibility: lack of additionality (West et al., 2023), non-permanence (Honegger et al., 2022), and leakage (Filewod and McCarney, 2023). In a recent paper, Pande (2024) accurately diagnoses the lack of reliable information on both the demand and supply sides. She suggests that price variations contribute to VCM failures, which, in her view, could be addressed by a cap-and-trade system. While this is an intriguing proposal, we think that a cap-and-trade system would not solve the fundamental flaws of the carbon credit market.

First, while it is true that some price variability arises from the heterogenous quality of carbon credits and poor information, there is a crucial need of several features: 1) enhanced capacity to assess credit quality (Balmford et al., 2023) and 2) reliable and transparent information (Delacote et al., 2024). These measures would enable all participants to evaluate the social cost of the carbon credits (Groom and Venmans, 2023) and effectively incorporate them into their climate strategies. These are essential prerequisites for any market to function properly and are not exclusive to a cap-and-trade system.

Second, heterogeneous quality is just one factor causing price variation. The assumption that "a specific reduction in emissions has the same value to humanity, regardless of location" holds in a first-best world where all project attributes are internalized. However, in reality, price variation reflects the diverse attributes of VCM projects. For example, compare two forest conservation projects: one excluding local communities and another promoting sustainable community management. Whereas both might be equally effective in conservation, the latter has greater social value thus a higher price. A cap-and-trade system could disadvantage more ambitious projects that also enhance biodiversity and local livelihoods (Simonet et al., 2016).

In other words, carbon credits should be viewed as differentiated goods implying price heterogeneity. Some price variation may be desirable across projects, provided impacts are effectively assessed, information is transparent, and the non-carbon components are factored in.

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