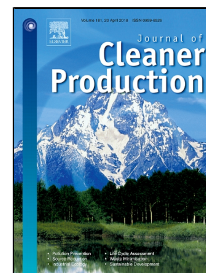


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Corporate greenhouse gas inventories, guarantees of origin and combined heat and power production – analysis of impacts on total carbon dioxide emissions

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Abstract

The Greenhouse Gas Protocol 'Corporate Accounting and Reporting Standard' (Corporate Standard) and the EU frameworks of guarantees of origin (GO) and emissions disclosure of energy carriers are intended to inform decision-making and reduce GHG emissions. This study analyses how decisions on combined heat and power (CHP) production and purchases of electricity and CHP-based district heating are incentivised by the Corporate Standard and EU frameworks. It also analyses how the EU frameworks relate to CO₂ emissions reductions through CHP production.

Using a consequential CO₂ assessment method for comparison, the study shows that purchasing decisions supported by the Corporate Standard or the GO scheme can increase total CO₂ emissions. It also shows that the Corporate Standard and EU frameworks can counteract CHP production and its contribution to CO₂ emissions reduction. We recommend that consequential GHG assessment methods be used for emissions reduction decisions, including when designing policy instruments aimed at emissions reduction.

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