

Can Environmental Performance and Targets Signal True Sustainability Advancements? An Evaluation Framework with Evidence from Polluting Industries

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Abstract-

Truly sustainable firms have the potential to drive transformative change for the planet and society. This article operationalizes the true sustainability concept by offering an evaluative framework for its assessment. Building on signaling theory, our framework assesses true sustainability by integrating environmental performance and targets, providing a holistic perspective. Applying this framework to 12,312 global observations from leading, highly polluting industries in steel, cement, and aluminium, we identify selective environmental achievements and targets centered primarily on greenhouse gas emissions, overlooking broader environmental themes. Moreover, most producers set distant environmental targets (2050 or beyond), lacking interim milestones or alignment with prior environmental achievements, thereby compromising target feasibility and future orientation towards true sustainability. The framework is applicable across sectors, geographical contexts, and time frames, offering value to transition finance providers, socially responsible investors, and managers aiming to foster true sustainability advancements and manage the green transition.

Index Terms- environmental performance; environmental targets; true sustainability; signals; polluting industries; emissions; selective environmental behavior; transition finance

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