POLICY FORUM

Corporate emissions targets based on effort-sharing formulas risk disadvantaging emerging companies developing small scale wind turbines and other technologies.

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CLIMATE POLICY

Corporate emissions targets and the neglect of future innovators

Targets can distort competition in favor of incumbent firms

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Widely recognized as key partners for achieving international climate goals (*1*, *2*), businesses like to indicate that their targets and activities are "Paris-aligned." In response, research and initiatives have emerged to guide and assess whether companies' targets represent an adequate mitigation effort to achieve the Paris Agreement. Here, we highlight conceptual limitations of effort-sharing approaches applied to companies and argue that the fundamental assumption of using emission-reduction targets as the central and often sole metric for setting or benchmarking individual corporations' climate action ambition is simply insufficient because future innovators are neglected. Although emissions targets can help curb emissions, we detail the risks of relying on individual corporation's emissions targets to guide and track progress in aligning the economy with the Paris Agreement goals. Last, we clarify the distinct roles of companies as agents of innovation and of market regulators and supervisors as either definers or enforcers of market-wide objectives for sustainability.

At present, the primary authority offering standards and guidance for emissions allocations is the Science Based Targets initiative (SBTi), which publicly "validates" more than a thousand companies as Paris-aligned on the basis of their emissions reduction targets. Such validated companies are likely to experience reputational benefits, attract investment from green investors, and in larger numbers may soften upcoming standards and regulations, potentially slowing down the necessary market transition. Although SBTi has recently acquired charitable status, its funding is closely tied to corporate interests (see supplementary materials). In 2023, 48% of their budget consisted of fees paid by corporations for their emissions target validation services, with another 45% originating from the Bezos Earth Fund and the IKEA Foundation.

So far, voluntary emissions pledges are found to correlate with increased climate action (*3*). Yet the causal link between a company adopting a target and increased action is not clear, nor is the effectiveness of the actions themselves (*3*), and pledges remain collectively insufficient as global emissions continue to rise (*1*, *2*). The voluntary nature of companies' targets and their opacity are increasingly criticized, with calls from policy-makers and scientists for greater scrutiny and enforceability (*2*–*4*). Here, we go beyond existing critical observations of SBTi methods and results to discuss the conceptual limitation of seeking to allocate the remaining emissions space across incumbent companies. We argue that individual companies cannot claim to be 1.5°C-aligned on the basis of an emissions target alone because their role needs to be contextualized in terms of innovation capacity. Aligning corporations' emissions with global or national objectives requires regulations that address technology innovation and production efficiency jointly.

PARIS-ALIGNED TARGETS AND INDIVIDUAL FIRMS

Conceptually, emissions targets are meaningful and commonly used indicators for measuring the ambition of countries' efforts as fair contributions to achieve the Paris Agreement (*5*). Only by considering whether an emissions target represents a fair contribution to a global collective action problem can its adequacy be assessed (*6*). Governments on the national, regional, and city level as well as their fiscal budgets and sovereign wealth funds can direct the green transition, which businesses can enable through innovation and decarbonization (*3*).

The equity considerations of the Paris Agreement ultimately serve people, not companies (*7*). In competitive markets, firms appear, compete for market share, merge, liquidate, or bankrupt. Thus, the Paris Agreement's equity principles cannot directly translate into target-setting formulas for companies because doing so would assume and promote their continued existence in the future. Despite this limitation,

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