

The proliferation of carbon labels

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To the Editor - A recent review article ¹ surveyed the state of research on carbon labels, with a focus on optimal design in terms of validity and effectiveness. Implicit in many of the studies cited in the review – but not the review itself – is an assumption that a given label is sponsored by a disinterested, science-oriented third-party and that the buyer is considering only one labeling system. In actuality, the marketplace is awash in dozens of carbon and hundreds of ecolabels that compete for the consumer's attention ¹, and not all of them are impartial or well-intentioned. This has at least three implications for research on carbon labels.

First, the multitude of labels in current use demonstrates the ease with which these can be established, and begs the question of why so many are needed. Labels can be set up and run by governments, NGOs, industry associations and other entities. Each sponsor type has different objectives: NGOs typically establish a label to stimulate consumer demand for climate mitigation, whereas industry associations generally seek to advance the economic considerations of the majority of their constituents. Unsurprisingly, industry sponsored labels tend to be the least stringent ². In these instances, label design may have more to do with market strategy than with state-of-the art knowledge about carbon measurement. For example, introduction of a lax label to compete with a stringent established one can be an effective competitive move to purposefully confuse and tilt purchasing decisions in favor of more polluting products ³, not to mention a form of greenwashing. Or it can be an effort to preempt regulation that would set limits on products' embedded carbon or the emissions they will release throughout their lifetimes ⁴. Regardless, when a lax standard becomes predominant, the important issue that researchers should tackle is not about making it salient in purchasing decisions, but almost the opposite question: what are the ramifications of any success that it may have ⁵? Even when the intent behind creation of a new label is not insidious, in purchasing situations where more than one

label is present the question facing the customer is likely to shift, or at least expand, from “which product to buy” to “which label to believe, if any”.

Second, and conceptually distinct from the issue of label stringency and trustworthiness, is the issue of cognitive overload. There are both many carbon labels to choose from and also a great many product categories for which these labels are available. They span items from the relatively benign, like electric toothbrushes, to particularly consequential ones like automobiles. Having labels for these various products may suggest to consumers that all purchasing decisions are equally important and truly impactful. This transfer of responsibility to the consumer is not inconsequential. One possible outcome is that consumers may become indifferent ⁶. Another is that labels could become increasingly paralyzing and anxiety inducing ⁷. It is unhelpful to impose a heavy burden of world-saving consequence upon each and every quotidian purchase, especially when not many of us understand which choices matter most ⁸.

Finally, the sheer ubiquity of carbon labels may also make consumers feel that they are actually doing a positive thing when buying a product, whereas in almost all cases the best that can be hoped for is that they are buying one that is less damaging than an alternative ⁹. In encouraging consumers to assess whether to buy item A or item B, carbon labels create a choice architecture that is constrictive, making other options less apparent. Purchasing is often not the only possibility, and consumers should consider extending the life of products they already own, or changing their current processes and routines to avoid the product altogether. The proliferation of carbon labels, which confers upon them the sense that they are an important form of climate action, unavoidably suggests to consumers that they can buy their way to sustainability, an idea that is clearly untenable when applied broadly ¹⁰.

These three points suggest that researchers should study the causes and consequences of carbon label proliferation. As a first step, it is important to recognize that the rapid growth in the number of carbon labels is not necessarily a friendly competition on the way to devising the perfect label. Rather, in large part it is an outcome of purposeful business strategy in competitive markets and in regulatory arenas. And if we consider that many businesses do not take meaningful action to significantly reduce their emissions, then we cannot assume that their efforts on carbon labels depart from their overall carbon strategy. Thus, the effect of carbon labels should not be studied in isolation but rather examined alongside other aspects of corporate behavior, such as lobbying and political donations for climate inaction, or, conversely, product innovation and emission reduction activities. Research should also zoom out from the study of individual labels and focus more on arenas with multiple standards, to assess whether they are characterized by dynamics of racing to the top or racing to the bottom in terms of label stringency and associated carbon emissions.

In parallel, researchers should recognize that carbon labels are fast becoming an established feature of contemporary life and begin studying what beliefs and behaviors the use of carbon labels promotes or replaces. A worrisome possibility is that labels will encourage individuals to grapple with climate change only through consumerism. Thus, a key question is whether the ubiquity of carbon labels diminishes interest in enacting other carbon mitigating pursuits or is perhaps a gateway to greater commitment to carbon action in spheres like civil society and politics. More generally, researchers should examine not only what each carbon label may or may not yield on its own, but also how labeling systems interact with other efforts and behaviors, and what social outcomes they collectively generate.

Competing interests

The author declares no competing interests.

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