

Carbon Footprinting and Pricing Under Climate Concerns

Marco Bertini

ESADE -- Ramon Llull University

Stefan Buehler

School of Economics and Political Science, University of St. Gallen

Daniel Halbheer

HEC Paris

Donald Lehmann

Columbia Business School

Cite as:

Bertini Marco, Buehler Stefan, Halbheer Daniel, Lehmann Donald (2020), Carbon Footprinting and Pricing Under Climate Concerns. *Proceedings of the European Marketing Academy*, 49th, (62615)

Paper from the 49th Annual EMAC Conference, Budapest, May 26-29, 2020.



Carbon Footprinting and Pricing Under Climate Concerns

Abstract

This paper studies how marketers should choose the carbon footprint and price of a product when consumers have climate concerns. We first derive the profit-maximizing carbon footprint and price, and examine the impact of stronger climate concerns on the optimal marketing activities. Next, we provide conditions under which offsetting the emissions in a voluntary market to achieve a net zero carbon footprint is optimal. Finally, we consider the impact of product-level decisions on the carbon emissions of the firm as a whole. Interestingly, we find that a firm can become a victim of its own success, as a greener product may boost sales to the point that overall emissions also increase.

Keywords: *Product Design; Carbon Footprint; Net Zero Carbon Emissions*

Track: Pricing & Promotions