



palgrave▶pivot

Eco-Label Visual Design and Sustainability

The Impact on Consumer Perceptions and Market Trends

Carmela Donato

palgrave
macmillan

Eco-Label Visual Design and Sustainability

Carmela Donato

Eco-Label Visual Design and Sustainability

The Impact on Consumer Perceptions
and Market Trends

palgrave
macmillan

Carmela Donato
Department of Economics
University of Roma Tre
Rome, Italy

ISBN 978-3-031-82760-0 ISBN 978-3-031-82761-7 (eBook)
<https://doi.org/10.1007/978-3-031-82761-7>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer
Nature Switzerland AG 2025

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Cover illustration: © Melisa Hasan

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

If disposing of this product, please recycle the paper.

FOREWORD

Research is most valuable when it combines methodological precision with passion, and this book is a testament to that synergy. Carmela Donato is a scholar whose work reflects both intellectual rigor and a deep commitment to sustainability. Her research has explored sustainability from multiple perspectives, including fashion, food packaging, food consumption, and aesthetics. This book focuses on a singular yet impactful element: eco-label certifications and their role in visually and aesthetically communicating sustainability.

Through a multidisciplinary lens (aesthetic, psychology, and consumer behavior), it highlights the significance of visual and conceptual complexity, color schemes, and textual clarity in shaping attitudes toward sustainability. With empirical rigor, the author provides insights that extend beyond theory, offering practical guidelines for designers, regulators, and businesses aiming to strengthen sustainable branding efforts.

Eco-labels are not merely certifications; they are fundamental tools for sustainability communication and green marketing. Through a nuanced analysis of design elements, this book reveals how visual choices influence sustainability perceptions. As sustainability becomes a priority across industries, eco-labels serve as key instruments in guiding consumers toward responsible choices. However, their impact is often diminished by consumer confusion and inconsistent visual communication. This

book addresses these challenges directly, presenting an extensive empirical study on how eco-label design influences perceptions of sustainability and consumer behavior.

From a theoretical perspective, this book systematically examines how design elements shape consumer perceptions, contributing to the growing discourse on sustainable consumption and visual communication. It presents a well-structured and compelling argument for why eco-labels should be seen not merely as promotional tools but as catalysts for change.

Carmela Donato's ability to bridge academic research and practical applications makes this book a valuable resource for a broad audience. It is a rigorous contribution to the study of sustainable consumption while also offering actionable insights for businesses seeking to enhance green marketing strategies and policymakers working to refine eco-label regulations.

Her commitment to sustainability research is driven by the belief that knowledge should serve a greater purpose—helping build a more responsible and environmentally conscious world. This work is an invitation to rethink how we communicate sustainability, making it more accessible, comprehensible, and ultimately more effective in shaping consumer behavior toward responsible choices.

It is rare to find a researcher who not only masters the complexities of her field but also conveys them with clarity and purpose. Carmela Donato does precisely this, and I am certain that her work will spark further dialogue and inspire meaningful change.

Simona Romani
Luiss University
Rome, Italy

CONTENTS

1	Introduction	1
2	Eco-Label as a Sustainable Communication Tool	5
1	<i>Introduction</i>	5
2	<i>Green Marketing: Driving Sustainable Choices Through Signals: The Role of Eco-Labels</i>	6
3	<i>Green Marketing Signals: Types of Eco-Labels</i>	9
3.1	<i>Environmental Eco-Labels</i>	13
3.2	<i>Ecological Eco-Labels</i>	14
3.3	<i>Fair Trade Eco-Labels</i>	15
4	<i>Eco-Label Stakeholders: Consumers, Producers, and Third-Party Actors</i>	17
4.1	<i>Consumers</i>	17
4.2	<i>Producers</i>	22
4.3	<i>Third-Party Entities</i>	23
5	<i>Eco-Labels in Action: Business Cases Driving Consumer Preference and Market Success</i>	26
5.1	<i>Nestlé</i>	26
5.2	<i>Unilever</i>	27
5.3	<i>Findus</i>	28
5.4	<i>IKEA</i>	29
6	<i>Eco-Labels in Green Consumerism</i>	30
	<i>References</i>	33

3	Aesthetic Influence on Consumer Behavior	39
1	<i>Introduction</i>	39
2	<i>Aesthetic Psychology and the Dimensions of Aesthetic Experience</i>	41
2.1	<i>Psychophysical Variables</i>	42
2.2	<i>Collative Variables</i>	44
2.3	<i>Proportion and Balance</i>	50
3	<i>Unraveling Fluency: Cognitive Mechanisms Behind Aesthetic Judgments</i>	51
3.1	<i>Perceptual Fluency</i>	55
3.2	<i>Conceptual Fluency</i>	57
4	<i>The Role of Aesthetic Dimensions and Fluency in Consumer Behavior</i>	59
	<i>References</i>	65
4	The Effect of Eco-Label Logos Visual Design on Consumers' Sustainability Perceptions: An Empirical Study	75
1	<i>Introduction</i>	76
2	<i>Theoretical Background</i>	78
2.1	<i>Sustainability Perceptions and Aesthetic Dimensions in Visual Communication</i>	78
2.2	<i>Eco-Labels Visual Design and Hypotheses Development</i>	79
3	<i>Methodology</i>	83
3.1	<i>Stimuli Selection</i>	84
3.2	<i>Visual Dimensions Operationalization</i>	84
3.3	<i>Color Background and Textual Information Operationalization</i>	86
3.4	<i>Procedure</i>	87
4	<i>Results</i>	88
5	<i>Discussion</i>	92
	<i>References</i>	95

5 Implications for Academics, Practitioners, and Policymakers	101
1 <i>Introduction</i>	102
2 <i>Implications for Academics</i>	104
3 <i>Implications for Practitioners and Policymakers</i>	106
4 <i>Limitations and Future Research Directions</i>	110
<i>References</i>	112
Index	117

LIST OF FIGURES

Chapter 2

Fig. 1	A simplified model of environmental orientation during the consumption process (<i>Source</i> Peattie K., 2001)	18
Fig. 2	The green purchase perception matrix (<i>Source</i> Peattie K., 2001)	20
Fig. 3	A two-dimensional model of the cognitive perspective on environmental products (<i>Source</i> D'Souza C., 2004)	21
Fig. 4	Certification Triangle (<i>Source</i> Van Amstel et al., 2008)	25

Chapter 3

Fig. 1	Relationship between pleasantness and brightness (<i>Source</i> Guilford, 1934)	43
Fig. 2	Relationship between pleasantness and colors (<i>Source</i> Guilford, 1940)	43
Fig. 3	The Wundt curve in relation to stimulus complexity	47

Chapter 4

Fig. 1	Conceptual model	83
Fig. 2	Selected stimuli	85

LIST OF TABLES

Chapter 2

Table 1	The three eco-label types	12
---------	---------------------------	----

Chapter 4

Table 1	Eco-labels and design elements' scores	87
Table 2	Measurement items	89
Table 3	Descriptives	90
Table 4	Results of multilevel regression models (standardized coefficients)	92



Introduction

Abstract This book examines the pivotal role of eco-labels in promoting sustainability, exploring how their visual design influences consumer perceptions and behaviors. While eco-labels serve as signals of environmental and ethical responsibility, their effectiveness hinges on aesthetic elements like complexity, color, and text. Grounded in marketing, design, and consumer psychology, the book integrates Berlyne's aesthetic theories with empirical findings, demonstrating how well-designed eco-labels enhance trust, familiarity, and sustainability perceptions. Through case studies and an original study using real eco-labels, it provides practical insights for marketers, designers, and policymakers to create visually engaging labels that foster sustainable consumer behavior.

Keywords Eco-Labels · Sustainability · Aesthetic Psychology · Consumer Perceptions · Visual Design

In today's consumer-driven marketplace, sustainability has evolved from a niche concern into a widespread expectation, shaping both purchasing decisions and brand positioning. To meet this growing demand, eco-labels have become essential tools for companies. These labels indicate that a product is sustainably produced, signaling environmental and ethical responsibility. In doing so, they enhance perceptions of both