

Strategies for Sustainability

Rodrigo Lozano

Toward Sustainable Organisations

A Holistic Perspective
on Implementation Efforts

 Springer

Strategies for Sustainability

Series Editors

Rodrigo Lozano

Faculty of Engineering and Sustainable Development

University of Gävle

Gävle, Sweden

Angela Carpenter

Faculty of Engineering and Sustainable Development

University of Gävle

Gävle, Sweden

The series focuses on “implementation strategies and responses” to sustainability problems – at the organizational, local, national, and global levels.

Our objective is to encourage policy proposals and prescriptive thinking on topics such as: sustainability management, sustainability strategies, lifestyle changes, regional approaches, organisational changes for sustainability, educational approaches, pollution prevention, clean technologies, multilateral treaty-making, sustainability guidelines and standards, sustainability assessment and reporting, the role of scientific analysis in decision-making, implementation of public-private partnerships for resource management, regulatory enforcement, and approaches to meeting inter-generational obligations regarding the management of common resources.

We favour trans-disciplinary perspectives and analyses grounded in careful, comparative studies of practice, demonstrations, or policy reforms. This largely excludes further documentation of problems, and prescriptive pieces that are not grounded in practice, or sustainability studies. Philosophically, we prefer an open-minded pragmatism – “show us what works and why” – rather than a bias toward a theory of the liberal state (i.e. “command-and-control”) or a theory of markets. We invite contributions that are innovative, creative, and go beyond the ‘business as usual’ approaches.

We invite Authors to submit manuscripts that:

- Document and analyse what has and has not worked in practice;
- Develop implementation strategies and examine the effectiveness of specific sustainability strategies;
- Propose what should be tried next to promote greater sustainability in natural resource management, energy production, housing design and development, industrial reorganization, infrastructure planning, land use, business strategy, and organisational changes;
- Prescribe how to do better at incorporating concerns about sustainability into organisations, private action, and public policy;
- Focus on trans-disciplinary analyses grounded in careful, comparative studies of practice or policy reform; and
- Provide an approach “...to meeting the needs of the present without compromising the ability of future generations to meet their own needs,” and do this in a way that balances the goal of economic development with due consideration for environmental protection, social progress, and individual rights.

Themes covered in the series are:

Sustainability management

Sustainability strategies

Lifestyle changes

Regional approaches

Organisational changes for sustainability

Educational approaches

Pollution prevention

Clean technologies

Multilateral treaty-making

Sustainability guidelines and standards

Sustainability assessment and reporting

The role of scientific analysis in decision-making

Implementation of public-private partnerships for resource management

Governance and regulatory enforcement


Approaches to meeting inter-generational obligations regarding the management of common resources

Rodrigo Lozano

Toward Sustainable Organisations

A Holistic Perspective on Implementation
Efforts

 Springer

Rodrigo Lozano 
Faculty of Engineering and Sustainable Development
University of Gävle
Gävle, Sweden

ISSN 2212-5450

ISSN 2452-1582 (electronic)

Strategies for Sustainability

ISBN 978-3-030-99675-8

ISBN 978-3-030-99676-5 (eBook)

<https://doi.org/10.1007/978-3-030-99676-5>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

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 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.

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

To our future change agents, may this book serve as a stepping stone to great changes.

To Dave: This book would not have been possible without your input. You were a great teacher and mentor. We will miss your great knowledge, experience, elegance, kindness, and wit.

Foreword

Two essential prerequisites for all types of organisations to be successful are the need of orientation and a long-term perspective.

Among all the paradigms composing this fundamental set of principles, “sustainability” holds a pivotal position. In essence, it has become virtually impossible to oppose or criticise any concept or resolution that claims to be based on sustainability. On the other hand, considerable efforts have been made to establish an agreed and elaborate understanding of sustainability as a (in Rodrigo Lozano’s words) “broad, complex, controversial, open-ended and challenging notion”.

Scientific research digested, evaluated, and displayed the plethora of experiences organisations have made in their attempts to integrate “sustainability” into their structure, culture, and, of course, their business models. What we see as an outcome of this process is sustainability finding its way into the established set of fundamental pillars of economic and societal evolution. Based on this wealth of documentation, on this treasure chest of reliable data and findings, we are now in a position to pose a set of key questions to be considered if the implementation of “sustainability” in an organisation should become a true success story:

- Is there an established common understanding on the various dimensions of “sustainability” as well as “sustainable development”?
- Is the implementation of “sustainability” understood as a process of transformation embedded in a holistic strategy of “change management”?
- Is there a best practice for applying “tools, initiatives, and approaches” in the framework of implementing strategies?
- To what extent have specific types of organisations (representing civil society, public service, or corporations) contributed to the development of a common and robust understanding of “sustainable development”?
- As to the criteria for successful implementation: Is there a common understanding on the relevance of external stimuli, internal drivers and hurdles, and the role of partnerships?

This book makes active use of Rodrigo’s unique academic skill and experience to offer not only elements for answers and approaches to each of these key

questions—he also manages to elaborate and display the very essence in each of these clusters. Against the background of 30 years of my experience in environmental policy at national, European (I had the honour of leading the EU Presidency Team in 1998, 2006, and 2016 and chaired the Management Board of EU’s Chemical Agency ECHA for 4 years) as well as international level, I fully associate myself with Rodrigo’s approach and key findings. It was a pleasure for me to dig into his analysis, a true milestone in scientific interpretation and guidance for implementing this key paradigm.

Austrian Ministry of Sustainability and Tourism
Wien, Austria

Thomas Jakl

Acknowledgements

This book is the result of many years of research and teaching sustainability in organisations. I would like to thank those who made this book possible, in particular, Maria Barreiro-Gen and David Cromie (who also proofread the manuscript) for their continuous encouragement, inspiration, and pressure in encouraging me write this book.

I would also like to thank my parents for giving me the mindset and drive to making sustainability a reality. I would also like to thank all the respondents of the surveys, whose responses have been invaluable in the making of this book.

Contents

1	Introduction	1
1.1	Introduction	1
2	Sustainable Development and Sustainability	5
2.1	Introduction	5
2.2	A Timeline of Sustainable Development	7
2.3	Sustainability Perspectives	11
2.4	SD and Sustainability Discussion	13
	References	14
3	Organisations and Their Contribution to Sustainability	19
3.1	Introduction	19
3.2	Organisational System Elements	20
3.3	Organisation Stakeholders	23
3.4	Organisational System Interactions	26
3.5	Organisations' Sustainability Efforts	30
	References	33
4	Tools, Initiatives, and Approaches Used for Implementing Sustainability	39
4.1	Introduction	39
4.2	Operations and Production-Oriented TIAs	39
4.2.1	Circular Economy	40
4.2.2	Cleaner Production (CP)	41
4.2.3	Design for the Environment (DfE)	42
4.2.4	Factor X	44
4.2.5	Green Chemistry (GC)	45
4.2.6	Industrial Ecology (IE)	46
4.2.7	Life Cycle Assessment (LCA) and Life Cycle Management (LCM)	47
4.3	Management and Strategy-Oriented TIAs	48
4.3.1	Corporate Citizenship (CC)	48

4.3.2	Corporate Social Responsibility (CSR)	48
4.3.3	Corporate Sustainability (CS)	51
4.3.4	Sustainable/Socially Responsible Investment (SRI)	52
4.3.5	(More) Sustainable Business Models.	52
4.3.6	The Natural Step (TNS).	54
4.3.7	The Triple Bottom Line (TBL)	54
4.4	Supply Chain-Oriented TIAs	55
4.4.1	Eco-Labeling.	55
4.4.2	Sustainable Marketing (SM)	56
4.4.3	Sustainable Livelihoods (SL).	56
4.4.4	Sustainable Supply Chains (SSC)	57
4.5	Assessment- and Reporting-Oriented TIAs	58
4.5.1	Environmental and Social Accounting (ESA)	58
4.5.2	Environmental Management Systems (EMS)	58
4.5.3	Integrated Management Systems	60
4.5.4	Sustainability Reporting (SR)	60
4.6	TIA ‘Discussion’	62
	References.	63
5	Organisational Change Management for Sustainability	75
5.1	Introduction	75
5.2	Change Typologies.	76
5.3	Change Drivers and Resistance to Change	78
5.4	Change Incorporation and Institutionalisation.	79
5.5	Organisational Change Management for Sustainability	79
5.5.1	Sustainability Change Drivers and Resistance to Change	81
5.5.2	Sustainability Incorporation and Institutionalisation in Organisations	84
5.6	Discussion	85
	References.	85
6	Civil Society Organisations’ Contributions to Sustainability	89
6.1	Introduction	89
6.2	Sustainability Priorities and Impact.	90
6.3	Use of TIAs by CSOs.	92
6.4	Sustainability Change Management in CSOs	95
6.5	Sustainability Collaboration in CSOs	98
6.6	Discussion and Conclusions	99
	References.	100
7	Corporations’ Contributions to Sustainability	103
7.1	Introduction	103
7.2	Sustainability Priorities and Impact.	104
7.3	Use of TIAs by Corporations.	106
7.4	Sustainability Change Management in Corporations	109

- 7.5 Sustainability Collaboration in Corporations. 111
- 7.6 Discussion and Conclusions 112
- References. 113
- 8 Public Sector Organisations’ Contributions to Sustainability 115**
 - 8.1 Introduction 115
 - 8.2 Sustainability Priorities and Impact. 116
 - 8.3 Use of TIAs by PSOs. 118
 - 8.4 Sustainability Change Management in PSOs 120
 - 8.5 Sustainability Collaboration in PSOs. 123
 - 8.6 Discussion and Conclusions 125
 - References. 126
- 9 Towards More Sustainable Organisations: Discussions and Conclusions 127**
 - 9.1 Introduction 127
 - 9.2 Sustainability Priorities and Impacts 129
 - 9.3 Use of TIAs by PSOs. 130
 - 9.4 Sustainability Change Management 132
 - 9.5 Sustainability Collaboration. 136
 - 9.6 Conclusions 137
 - References. 138
- Index. 141**

Acronyms

CC	Corporate citizenship
CE	Circular economy
ChL	Chemical leasing
CP	Cleaner production
CS	Corporate sustainability
CSOs	Civil society organisations
CSR	Corporate social responsibility
DfE	Design for the environment
EMAS	EU Eco-management and audit scheme
EMS	Environmental management systems
ESA	Environmental and social accounting
FTSE	First tier sustainability equilibria
GC	Green chemistry
GRI	Global Reporting Initiative
HEIs	Higher education institutions
IE	Industrial ecology
ILO	International Labour Organization
IMS	Integrated management systems
ISO	International Organization for Standardization
LCA	Life cycle assessment
LCM	Life cycle management
MDGs	Millennium Development Goals
MSOS	More sustainability-orientated state
MuSIC	Multidimensional sustainability influence change
NGOs	Non-governmental organisations
PSOs	Public sector organisations
SBMs	Sustainable business models
SD	Sustainable development
SDGs	Sustainable development goals
SM	Sustainable marketing
SL	Sustainable livelihoods

SQ	Status quo
SQN	Status quo novo
SR	Sustainability reporting
SRI	Sustainable/socially responsible investment
SSC	Sustainable supply chains
TBL	Triple bottom line
TIA _s	Tools, initiatives, and approaches
TNS	The Natural Step
TQM	Total quality management
TTSE	Two-tiered sustainability equilibria

Chapter 1

Introduction



1.1 Introduction

This book aims to provide a complementary perspective on technocentric and managerial approaches, so that organisations can balance their sustainability priorities and align them with their impacts; use the tools, initiatives, and approaches (TIAs) more efficiently; engage with change processes; and tap into the considerable benefits of entering into collaboration with other organisations. The book is divided into nine chapters.

Chapter 2 reviews the sustainable development (SD) and sustainability concepts. It traces their history from since the first definition of sustainability in 1713 to the current state. The chapter traces this history, where a number of sustainability perspectives can be found: (1) central focus, (2) substitutability of natural capital, (3) constituency, (4) trends; and (5) scope. These perspectives show that SD is a broad, complex, controversial, open-ended, and challenging notion that is open to different and, in many cases mutually exclusive, definitions and interpretations. This has created much controversy, especially since such characteristics makes sustainability difficult to implement or be of practical value. This chapter postulates that SD encompasses four dimensions (economic, environmental, social, and time), as well as their interrelations. The chapter also highlights that SD and sustainability have been used interchangeably, but they are inherently different. SD is the process by which we achieve sustainability, and sustainability is an ideal dynamic state.

Chapter 3 provides a theoretical discussion on organisations' contributions to sustainability. Organisations (divided into civil society organisations (CSOs), corporations, and public sector organisations (PSOs)) are an integral part of modern societies and have been instrumental in driving sustainability. In the last decade, there has been an increasing interest in organisational sustainability, where several definitions have been proposed. The most complete one encompasses the four dimensions of sustainability, the organisation system elements, its stakeholders,