

Second Edition

Accounting for the Environment

Rob Gray and Jan Bebbington



Accounting for the Environment was a milestone publication that helped shape the developing agenda of environmental accounting. This long-awaited new edition provides a comprehensive overview of the subject, and integrates the major new developments in both research and practice. The result is a more user-friendly text that provides a solid grounding in both environmental accounting and environmental management.

Environmental concerns are now widely recognized as essential components of all aspects of accountants' work and increasingly fundamental to all elements of accounting. Gray and Bebbington introduce and explain environmental issues as they relate to accountants today. A broad range of topics are covered, including:

- why accounting needs to respond to environmental issues;
- environmental management and 'greening' the organization;
- environmental management accounting;
- finance and the financial markets;
- external environmental, social and financial reporting;
- sustainability.

Accounting for the Environment, 2nd edition, places an increased emphasis on the emerging literature in the field and reveals a consciousness of the difficulties of developing an environmental agenda in business. It makes an excellent stand-alone text for advanced undergraduate and masters students and provides a firm base from which to explore more complex issues. Practitioners seeking to understand and implement environmental practice will also benefit from this useful text.

Rob Gray is Professor of Accounting at the University of Glasgow and Director of CSEAR.

Jan Bebbington is Professor of Accounting at the University of Aberdeen.

cover design: keenan



SAGE Publications

London • Thousand Oaks • New Delhi

www.sagepub.co.uk

ISBN 978-0-7619-7137-5



9 780761 971375

CONTENTS

<i>Preface and Personal Acknowledgements to the First Edition</i>	xi
<i>Preface to the Second Edition</i>	xiii
<i>About CSEAR and ACCA</i>	xv
<i>Acronyms and Abbreviations Used in the Text</i>	xvi

PART A: INTRODUCTION TO THE ISSUES 1

Overview	1
----------	---

1 Business and the Environment: The Challenge for Accounting and Finance	11
1.1 Introduction	11
1.2 Accountants, Accounting and the Environment	13
1.3 Accountants and Environmental Attitudes	17
1.4 Conclusions and Developing the Accountant's Role	19
Further Reading	19
Appendix 1.1 The Accountant and the Environment: a System View	22
Appendix 1.2 The Impact of the Environment on the Conventional Financial Statements	27
2 Business and the Environment: Agenda, Attitudes and Actions	28
2.1 Introduction	28
2.2 The Evolving Agenda	28
2.3 The Public, Media and Politicians	32
2.4 Business Attitude and Business Response	36
2.5 Business Response: Cost or Benefit?	38
2.6 Conclusions	40
Further Reading	42

PART B: MANAGEMENT INFORMATION AND ACCOUNTING 43

Overview	43
----------	----

3 Greening the Organization: Getting Started	48
3.1 Introduction	48
3.2 The Forces of Change	49
3.3 External Influences for Environmental Change	50

3.4 Internal Influences for Environmental Change: the Employees	52	6.6 Accounting in Energy Units	134
3.5 Senior Management: the 'Tone from the Top'	55	6.7 Some Issues for the Future	135
3.6 Performance Measurement and Appraisal Systems	59	Further Reading	136
3.7 The Accountants' Role in the Initiation of Change	60	Appendix 6.1 CEBIS Environmental Checklist: Energy Management	137
3.8 Conclusions	64	Appendix 6.2 Energy Efficiency Office of Scotland Checklist	138
Further Reading	64		
4 Environmental Policy: Adoption, Establishment and Implementation	66	7 Accounting and Controlling for the Costs of Waste, Packaging and Recycling	139
4.1 Introduction	66	7.1 Introduction	139
4.2 The Company's Own Environmental Policy	67	7.2 Some Aspects of the Wider Problem	139
4.3 The Environmental Charters	70	7.3 Corporate Waste Management	143
4.4 The CERES Principles	72	7.4 Accounting for Waste	146
4.5 ICC Business Charter for Sustainable Development	74	7.5 Packaging	149
4.6 Other Charters and Related Initiatives	78	7.6 Recycling and Reuse	151
4.7 Implementing and Monitoring the Policy	80	7.7 Domestic Waste, Local Authorities and Other Operators	155
4.8 Conclusions	82	7.8 Conclusions	157
Further Reading	83	Further Reading	158
Appendix 4.1 Shandwick Environment: 'Creating a Corporate Environmental Policy Statement'	84	Appendix 7.1 CEBIS Environmental Checklist: Waste Management	159
5 Environmental Audit and Management Systems: Assessment, Review and Attestation	87	8 Investment, Budgeting and Appraisal: Environment at the Heart of the Accounting and Financial Systems	160
5.1 Introduction	87	8.1 Introduction	160
5.2 Overview of Environmental Audit	88	8.2 Investment Spending	162
5.3 The Environmental Impact Assessment (EIA)	90	8.3 Investment Appraisal	165
5.4 The Environmental Survey	93	8.4 Performance Appraisal	174
5.5 Developing the Environmental Audit	97	8.5 R&D and Design	175
5.6 Developing an Environmental Management System	99	8.6 Budgeting and Forecasting	177
5.7 Eco-Management and Audit Scheme, BS7750 and ISO 14000	105	8.7 Conclusions	178
5.8 The Supplier Audits and Eco-labelling	109	Further Reading	179
5.9 National and Local Government and Environmental Audits	112	9 Life Cycle Assessment and the Mass Balance	180
5.10 Concluding Remarks	114	9.1 Introduction	180
Further Reading	116	9.2 The Mass Balance	181
Appendix 5.1 CEBIS Guide to Environmental Audit	117	9.3 Life Cycle Assessment	182
Appendix 5.2 ICC Basic Steps of an Environmental Audit	121	9.4 Considering the Life Cycle	183
6 Accounting and the Control of Energy Costs	122	9.5 The Methodology of LCA	185
6.1 Introduction	122	9.6 The Use of LCA	188
6.2 Energy: Some of the Wider Issues	123	9.7 A Role for Accountants?	190
6.3 Energy: Some of the Business Issues	125	9.8 Conclusions	192
6.4 Controlling Energy	129	Further Reading	192
6.5 Accounting for Energy	132	Appendix 9.1 The 'Green Accounts' from Danish Steel Works Ltd, Annual Report 1991	194