
Renewable Energy Technologies in Africa

Stephen Karekezi and Timothy Ranja



Zed Books Ltd
LONDON & NEW JERSEY

in association with

African Energy Policy Research Network
(Afrepren)

and

The Stockholm Environment Institute (SEI)

Contents

| | |
|--|------------|
| <i>List of Figures</i> | vi |
| <i>List of Tables</i> | vii |
| <i>List of Boxes</i> | ix |
| <i>List of Appendices</i> | ix |
| <i>List of Abbreviations</i> | x |
| <i>List of Units</i> | xiii |
| <i>Acknowledgements</i> | xiv |
| <i>About the Authors</i> | xv |
| <i>About AFREPREN, the FWD and the SEI</i> | xvi |
| Introduction | 1 |
| PART 1 Background | 7 |
| 1 The Energy Sector in its Geo-Political and Socio-Economic Setting | 9 |
| PART 2 The Development and Role of Renewable Energy Technologies in Africa | 17 |
| 2 Bio-Energy | 19 |
| 3 Solar Energy | 74 |
| 4 Wind Energy | 92 |
| 5 Small Hydro Technologies | 107 |
| PART 3 Factors Influencing the Dissemination of Renewable Energy Technologies and Strategies for Future Development | 133 |
| 6 Institutional Development | 135 |
| 7 Financing and Economic Issues | 150 |
| 8 Organization, Management and Maintenance | 172 |
| 9 Human Resource Development and Retention | 188 |
| 10 Equity | 201 |
| 11 Environment | 206 |
| PART 4 Policy Recommendations | 213 |
| 12 Policy Recommendations | 215 |
| <i>Bibliography</i> | 221 |
| <i>Appendices</i> | 243 |
| <i>Index</i> | 261 |