

Preface

This edited book forms part of the dissemination activity of a Research Councils UK funded project on off-grid electrification. The project, called OASYS South Asia (through grant no EP/G063826/1), is led by me as the Principal Investigator and includes four other partner organisations, namely School of Environment and Development, Manchester University, School of Built Environment, Edinburgh Napier University, The Energy and Resources Institute (TERI, India) and TERI University. The consortium has been working on developing suitable business models for off-grid electrification in developing countries since 2009. As part of the research activity, the consortium members have reviewed a huge volume of literature covering various aspects of off-grid project activities. These were initially presented as Working Papers of the project. This edited volume brings together a revised and updated collection of relevant working papers from this activity for wider dissemination.

This volume contains 12 chapters divided into three parts: Part I provides the background information on electricity access, discusses the developmental implications of rural energy infrastructure (or lack of it) and provides a review of alternative technologies used for off-grid electricity delivery. Part II provides detailed review of rural electrification experiences from around the world, with a special emphasis on off-grid electrification. Part III presents the business-related elements—participatory arrangements, financing, regulation and governance. Finally, a concluding chapter summarises the key findings and indicates further research agenda.

The work reported here has been discussed internally and in various workshops organised as part of the research activity. These were held in Edinburgh, Delhi and Dundee between 2010 and 2012. The chapters have thus benefited from the inputs and comments of a large number of participants from the academia as well as those involved in practice with off-grid electrification.

I hope this volume will prove to be a valuable addition to the literature on rural electrification and off-grid electrification and would benefit researchers and other stakeholders involved in policy-making and enhancing electricity access in rural areas of the developing world.

The work related to my contributions to the volume was carried out while I was with the Centre for Energy, Petroleum and Mineral Law and Policy (CEPMLP), University of Dundee. I acknowledge the support I received there. The book manuscript was prepared while I was relocating to the Institute of Energy and Sustainable Development (IESD), De Montfort University, Leicester, UK.

As the editor of the Volume I would like to thank all contributors to this volume for their continued support and hard work. I would like to thank the publisher—Springer for agreeing to publish this volume despite the specialised nature of the work that still faces limited academic attention. We would like to thank Elsevier for allowing us to reuse materials for a few papers that appeared in some form in their journals. We also thank the Energy and Resources Institute (TERI, New Delhi, India) and the National Renewable Energy Laboratory (NREL), Washington D.C. (USA) for allowing us to reuse some of diagrams from their works. Last but not the least, I would like to thank my wife (Debjani) and daughter (Saloni) for their support in completing this work over the summer of 2012 during a very stressful relocation exercise, thereby enduring a double externality (i.e. sacrificing the entire summer holidays for my academic pursuits and shouldering a higher share of the relocating stress).

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