

# Handbook for Financial and Development Professionals

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### Introduction

The purpose of this Handbook is to introduce financial and development professionals to clean energy technologies, enterprises and the issues involved in assisting or evaluating such enterprises.

The major objective of this handbook is to provide information and concepts that may guide finance and development organizations to become involved in project development, implementation and finance.

This Handbook is a companion to *AREED's Toolkit for Energy Entrepreneurs*. Unlike the Toolkit, which is designed in a building block fashion (from fact-finding to feasibility analysis to business planning), this handbook consists of separate chapters on reasonably self-contained topics.

Chapter 1 is an introduction to six clean energy technologies: solar PV, hydroelectricity, biomass, wind, solar hot water heaters and hybrid (combination) systems. The introductions are brief and non-technical; multiple world wide web sites are provided for additional information.

Chapter 2 provides brief descriptions of existing clean energy projects and enterprises. The major goal of this chapter is to show that sustainable, profitable businesses already exist in a variety of technologies and forms.

Chapter 3 describes the variety of business models that exist and tries to distill the lessons that have been learned regarding how these businesses grow, especially from the perspective of needing infusions of seed capital and a variety of business assistance.

Chapter 4 is a “how to” chapter aimed at energy entrepreneurs but useful to finance and development professionals in that it sets forth a format to preparing a project or enterprise business plan and provides two detailed examples of such business plans.

Chapter 5 presents the issues that need to be evaluated in making a decision about investing in or supporting a clean energy project. It includes supplementary checklists concerning market conditions, evaluating a project management team and conducting due diligence.

Chapter 6 presents some of the programs and organizations that provide financial and technical assistance to clean energy projects in developing countries.

Chapter 7 is another “how to” chapter on undertaking financial analysis.

Chapter 8 presents the complex subject of the environmental and social consequences of energy production and use.

Finally, Chapter 9 is a glossary, divided among financial terms, technical terms and energy measurement and conversion factors.

This first version of this Handbook is very rough. There is enormous scope for improvement and it is hoped that most of the suggestions will come from men and women using, rather than just reviewing, its contents. Any and all comments and suggestions are welcomed. Please send these to [areed@energyhouse.com](mailto:areed@energyhouse.com).

For the AREED<sup>1</sup> Team: Philip LaRocco  
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<sup>1</sup> African Rural Energy Enterprise Development initiative of UNEP, E&Co, the UN Foundations and many local partners in Ghana, Mali, Senegal, Zambia and Botswana. This Handbook and its companion Toolkit for Energy Entrepreneurs are available for non-commercial use and distribution at no cost (with attribution to AREED, UNEP and E&Co). Contact [areed@energyhouse.com](mailto:areed@energyhouse.com) for information.