

1. Record Nr.	UNINA9910459180303321
Autore	Wilkins Gill
Titolo	Technology transfer for renewable energy : overcoming barriers in developing countries / / by Gill Wilkins
Pubbl/distr/stampa	London : , : Earthscan, , 2002
ISBN	1-136-53320-6 1-282-78964-3 9786612789649 1-84977-628-8
Edizione	[First edition.]
Descrizione fisica	1 online resource (256 p.)
Disciplina	338.926 338.926091724
Soggetti	Appropriate technology - Developing countries Renewable energy sources - Developing countries Technology transfer - Developing countries Technology transfer Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Front Cover; Technology Transfer for Renewable Energy; Copyright Page; Contents; List of figures, tables and boxes; List of abbreviations; Foreword by Jose Goldemberg; Acknowledgments; Introduction; 1. A role for renewables; 1.1 Improving energy security; 1.1.1 Trends in world energy use; 1.1.2 Current deployment of renewable energy and future prospects; 1.1.3 The need for indigenous local energy sources; 1.1.4 A niche for renewable energy; 1.2 Powering sustainable development; 1.2.1 Energy services; 1.2.2 Energy and development; 1.2.3 Achieving international development targets 1.3 Reducing environmental impacts1.3.1 Local impacts; 1.3.2 Global impacts; 2. Transferring technology to developing countries: key actors and roles; 2.1 Developments in technology transfer; 2.1.1 Defining technology transfer; 2.1.2 Technology transfer in the context of sustainable development and climate change; 2.2 Key actors and roles; 2.2.1 Key actors; 2.2.2 The role of governments; 2.2.3 The role of

international finance institutions; 2.2.4 The role of private sector organizations; 2.2.5 The role of civil society; 2.3 Risks and rewards; 2.3.1 Risks; 2.3.2 Rewards

3. Investment in technology transfer3.1 Key investors for renewable energy; 3.1.1 International institutions; 3.1.2 National institutions; 3.1.3 Private companies; 3.1.4 Non-governmental organizations; 3.2 Investment trends; 3.3 Finance mechanisms; 3.3.1 Innovative finance mechanisms; 3.3.2 Potential investment via the CDM; 4. Barriers and options; 4.1 Barriers; 4.1.1 Introduction; 4.1.2 National policies and programmes; 4.1.3 Institutional structures; 4.1.4 Intellectual property and standards; 4.1.5 Information exchange, education and training; 4.1.6 Financing; 4.1.7 Social; 4.1.8 Others

4.2 Case studies4.2.1 Summary of barriers to solar home systems; 4.2.2 Summary of barriers to biomass cogeneration; 4.3 Options; 4.3.1 Encouraging technology transfer; 4.3.2 Overcoming the barriers in developing countries; 5. The way forward; 5.1 Actions needed; 5.1.1 Actions needed for solar home systems; 5.1.2 Actions needed for biomass cogeneration; 5.1.3 Common actions needed; 5.2 Engagement of key actors; 5.2.1 Key actions for government; 5.2.2 Key actions for international finance institutions; 5.2.3 Key actions for private companies; 5.2.4 Key actions for civil society; 5.3 Conclusion

Annex 1: Case StudiesAnnex 2: Analysis of case studies: options for overcoming barriers; References

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## Sommario/riassunto

This text highlights the role that renewable energy can play in achieving sustainable development. It focuses on rural areas of developing countries, looking in particular at stand-alone solar home systems and grid-connected biomass cogeneration plants. It analyzes the main barriers to the successful transfer of renewable energy technology, with case studies from a range of South-East Asian, South Asian, Pacific and African countries, and explains the ways in which these obstacles can be overcome. The roles of the key players involved and how the Kyoto Protocol can facilitate the transfer in order to mitigate climate change are also discussed.

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2. Record Nr.	UNINA9910299854603321
Autore	Salandro Wesley A
Titolo	Electrically Assisted Forming : Modeling and Control // by Wesley A. Salandro, Joshua J. Jones, Cristina Bunget, Laine Mears, John T. Roth
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-08879-3
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (366 p.)
Collana	Springer Series in Advanced Manufacturing, , 1860-5168
Disciplina	671.732
Soggetti	Manufactures Manufacturing, Machines, Tools, Processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction to Electrically-Assisted Forming -- Bulk Modeling Methodology for Electrically-Assisted Manufacturing -- The Electroplastic Effect -- Comprehensive EAF Modeling -- Experimental Findings for EAF -- Contact Effects of EAF -- Microstructural Effects on EAF -- Phase distribution Effects on EAF -- Analysis of EAF Modeling Sensitivity and Robustness -- Broader Impacts of EAF -- Tooling design considerations -- Additional Applications of Electrically-Assisted Manufacturing (EAM) -- Control design for Electrically-Assisted Forming -- Cost and Energy Analysis.
Sommario/riassunto	Maximizing reader insights into the latest research findings and applications of Electrically-Assisted Forming (EAF) – whereby metals are formed under an electric current field – this book explains how such a process produces immediate improved formability of metals beyond the extent of thermal softening, and allows metals to be formed to greater elongation with lower mechanical energy as well as allowing for lightweight brittle metals such as magnesium and titanium to be formed without external heating or annealing, enabling the more effective use of these lightweight metals in design. Including case studies that illustrate and support the theoretical content and real-world applications of the techniques discussed, this book also serves to enrich readers understanding of the underlying theories that influence electro-plastic behaviour. The authors have extensive experience in

studying Electrically-Assisted Forming and have written extensively on the topic with publications including experimental works, technical briefs, conference proceedings, journal articles, and analytical models.

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