Contents

Acknowledgments	xi
Introduction	1
Renewable Energy and Me	
Organization of the Book	6
Chapter 1: Renewable Energy — Clean, Affordable, and Reliable	9
Making Wise Choices	11
Understanding Energy	14
What is Renewable Energy?	21
The Pros and Cons of Renewable Energy	22
Prospects for the Future	27
Chapter 2: Conservation Rules —	
The Cornerstone of Your Energy Future	
Efficiency First!	33
Energy Conservation as a Renewable Source of Energy	38
Benefits of Energy Conservation	
Home Energy Use	40
Retrofitting Your Home for Energy Efficiency	42
The Silver Lining	72

Chapter 7: Passive Cooling — Staying Cool Naturally17	3
What is Passive Cooling?17	4
Tools in the Passive Cooling Toolbox17	5
Reducing Internal Heat Gain17	5
Reducing External Heat Gain17	6
Building a Better Future19	5
Chapter 8: Solar Electricity — Powering Your Home with Solar Energy19	7
What is a Solar Electric System?20	0
Buying a Solar Electric System22	3
Locating a Reliable Contractor23	7
Why Install Solar Electricity?23	8
Chapter 9: Wind Power — Meeting Your Needs for Electricity23	9
Is Wind Power in Your Future?24	0
Wind Power: A Brief History24	1
Understanding Wind Generators24	3
Wind Systems: Three Basic Options24	6
Is Wind Energy Appropriate Where You Live?24	7
Selecting a Wind Generator and Tower24	9
Financial Matters26	2
Wind Power without Installing a Wind Generator26	3
Chapter 10: Microhydro — Generating Electricity from Running Water26	7
An Introduction to Hydroelectric Systems26	8
The Anatomy of a Microhydro System26	9
Assessing the Feasibility of Your Site27	1
Assessing the Potential of a Microhydro Site27	3
Buying and Installing a System28	1
Finding an Installer or Installing a System Yourself29	0
The Pros and Cons of Microhydro Systems29	0
A Brief Afterword	3
Appendix29	5
Resource Guide	7
Index	7
About the Author23	6