

1. Record Nr.	UNINA9910809046403321
Titolo	America's energy future : technology and transformation // Committee on America's Energy Future, National Academy of Sciences, National Academy of Engineering, and National Research Council of the National Academies
Pubbl/distr/stampa	Washington, DC, : National Academies Press, c2009
ISBN	0-309-14909-6 1-282-45485-4 9786612454851 0-309-11603-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (737 p.)
Collana	America's energy future series America's energy future
Disciplina	333.790973
Soggetti	Power resources - United States Energy policy - United States Energy conservation
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 and index.
Nota di contenuto	""Foreword""; ""Preface""; ""Acknowledgments""; ""Acknowledgment of Reviewers""; ""Contents""; ""Executive Summary""; ""PART 1""; ""1 Context and Challenges""; ""2 Key Findings""; ""3 Key Results from Technology Assessments""; ""PART 2""; ""4 Energy Efficiency""; ""5 Alternative Transportation Fuels""; ""6 Renewable Energy""; ""7 Fossil-Fuel Energy""; ""8 Nuclear Energy""; ""9 Electricity Transmission and Distribution""; ""APPENDIXES""; ""Appendix A: Committee and Staff Biographies""; ""Appendix B: Meeting Participants""; ""Appendix C: Americaa€?s Energy Future Project"" ""Appendix D: Principal Units and Conversion Factors""""Appendix E: Select Acronyms and Abbreviations""; ""Index""
Sommario/riassunto	"Energy touches our lives in countless ways and its costs are felt when we fill up at the gas pump, pay our home heating bills, and keep businesses both large and small running. There are long-term costs as well: to the environment, as natural resources are depleted and pollution contributes to global climate change, and to national security

and independence, as many of the world's current energy sources are increasingly concentrated in geopolitically unstable regions. The country's challenge is to develop an energy portfolio that addresses these concerns while still providing sufficient, affordable energy reserves for the nation. The United States has enormous resources to put behind solutions to this energy challenge; the dilemma is to identify which solutions are the right ones. Before deciding which energy technologies to develop, and on what timeline, we need to understand them better. America's Energy Future analyzes the potential of a wide range of technologies for generation, distribution, and conservation of energy. This book considers technologies to increase energy efficiency, coal-fired power generation, nuclear power, renewable energy, oil and natural gas, and alternative transportation fuels. It offers a detailed assessment of the associated impacts and projected costs of implementing each technology and categorizes them into three time frames for implementation."--Publisher's description.

---