Record Nr. UNINA9910816161203321 **Titolo** The hydrogen economy: opportunities, costs, barriers, and R&D needs // Committee on Alternatives and Strategies for Future Hydrogen Production and Use, Board on Energy and Environmental Systems, Division on Engineering and Physical Sciences, National Research Council and National Academy of Engineering of the National Academies Pubbl/distr/stampa Washington, D.C., : National Academies Press, c2004 **ISBN** 1-280-17632-6 9786610176328 0-309-53068-7 Edizione [1st ed.] Descrizione fisica 1 online resource (256 p.) Disciplina 333.793 Soggetti Hydrogen as fuel Hydrogen as fuel - Economic aspects - United States Globalization Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references. Nota di contenuto FrontMatter -- Acknowledgments -- Contents -- Tables and Figures --Executive Summary -- 1 Introduction -- 2 A Framework for Thinking About the Hydrogen Economy -- 3 The Demand Side: Hydrogen End-Use Technologies -- 4 Transportation, Distribution, and Storage of Hydrogen -- 5 Supply Chains for Hydrogen and Estimated Costs of Hydrogen Supply -- 6 Implications of a Transition to Hydrogen in Vehicles for the U.S. Energy System -- 7 Carbon Capture and Storage -- 8 Hydrogen Production Technologies -- 9 Crosscutting Issues -- 10 Major Messages of This Report -- References -- Appendixes --Appendix A Biographies of Committee Members -- Appendix B Letter Report -- Appendix C DOE Hydrogen Program Budget -- Appendix D Presentations and Committee Meetings -- Appendix E Spreadsheet Data from Hydrogen Supply Chain Cost Analyses -- Appendix F U.S. Energy Systems -- Appendix G Hydrogen Production Technologies:

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