1. Record Nr. UNINA9910458551903321 Autore Avery William H. **Titolo** Renewable energy from the ocean: a guide to OTEC / / William H. Avery and Chih Wu New York; Oxford, [England]:,: Oxford University Press,, 1994 Pubbl/distr/stampa ©1994 **ISBN** 0-19-756024-5 1-280-44124-0 9786610441242 0-19-536111-3 1-60119-684-9 1-60129-849-8 Descrizione fisica 1 online resource (477 p.) Collana Johns Hopkins University: Applied Physics Laboratory Series In Science and Engineering 621.31/244 Disciplina Soggetti Ocean thermal power plants Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Previously issued in print: 1994. Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Foreword: Preface: Contents: 1 INTRODUCTION AND OVERVIEW: 1.1 The Ocean Thermal Energy Resource; 1.2 Design Requirements for OTEC Systems: 1.3 OTEC Research and Development Status: 1.4 Energy Transfer; 1.5 Investigations of Environmental Interactions of OTEC; 1.6 OTEC Costs and Commercialization; 2 OTEC HISTORICAL BACKGROUND; 2.1 The Development of Heat Engines; 2.2 Carnot, D'Arsonval, and Claude-Early French Experiments: 2.3 American Investigations Prior to 1973-The Andersons; 2.4 Survey of U.S. Developments 1970-1985; 2.5 Japanese Programs 1970-1985; 2.6 French Programs 1970-1985 2.7 OTEC Programs 1986-19903 OTEC SYSTEM CONCEPTS: 3.1 General Comments on Systems Engineering; 3.2 Overall Requirements and Options for Alternate Energy Sources; 3.3 OTEC Preliminary Systems

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Sommario/riassunto

Scientists and engineers around the world are striving to develop new sources of energy that have virtually unlimited potential. This book explores one of these energy alternatives, ocean thermal energy conversion. William H. Avery, the leading researcher in this field, describes the workings of an OTEC power plant and addresses how such a power source might be implemented for national use.