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Titolo	The Energy-Climate Continuum : Lessons from Basic Science and History // by Antoine Bret
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-07920-4
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (173 p.)
Disciplina	363.738/74 551.6
Soggetti	Energy Climate change Renewable energy resources Fossil fuels History Popular Science in Energy Climate Change/Climate Change Impacts Renewable and Green Energy Fossil Fuels (incl. Carbon Capture) History, general
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 and index.
Nota di contenuto	Part I The Problem: What is the problem? Men and Joules -- A few Must-Know -- Fossil Fuels -- ABC of Climate Science -- Part II Elements of Solution: Energy Storage, Carbon Sequestration and Geo-Engineering -- Non-Fossil Energy Sources -- Constraints and Hazards -- A Toy Model -- Part III History: Why Societies are Fragile -- When Things went wrong -- When Things went right -- Appendices.
Sommario/riassunto	This book puts the debates about the energy-climate continuum on a scientific ground! It is a must-read for everyone, who wants to understand how intimately the energy and climate debates are linked to each other, and who wants to participate in these omnipresent discussions. Antoine Bret explains in his book how fossil fuels became

indispensable for our society. He carefully explains how and why this impacts the earth's climate. And he points out that all available fossil fuels will sooner or later be used up. Therefore, he introduces and discusses the alternatives, which are currently considered. The book is divided into three parts. The first part explains the problem and where we stand today, the second part critically discusses possible elements of solution. The third part illustrates historic case studies, containing both warning as well as encouraging examples of societies at turning points. This book is a careful introduction to these topics. The basic science behind the problem and the debates are introduced in an understandable and nicely readable fashion. Facts are illustrated with simple back-of-the-envelope calculations, providing a good feeling for orders of magnitudes. A rich appendix provides additional background information for the interested readers. In this way, the book can even be a valuable resource for introductory university courses in physics, climate science, natural science, and many more subjects. This book is a real conversation starter, and can be recommended to everyone, specialist or non-specialist, who wants to understand the actual energy-climate debates and maybe even involve.
