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REVIEW

The Energy–Climate Continuum: Lessons from Basic Science and History

by Antoine Bret
Cham (Switzerland): Springer, 2014. 169 pages

reviewed by Cynthia Howell

Antoine Bret distills decades of his classroom teaching and research passion in *The Energy–Climate Continuum*. He addresses two very important topics that are a matter of great societal debate: energy use and climate. This book is a thoughtfully laid-out guide to help the reader grasp the immensity and intimacy of the energy and climate connection: a conversation starter and igniter. Whether you are a high school or university student, a professor, a behavioral and/or environmental scientist, or simply a concerned or curious citizen, you will be invited to draw your own conclusions about the issues presented as you gain basic insight into the energy and climate relationship. The thoughtful cohesive flow of scientific fact, graphs, and calculations, interwoven through the energy and climate story, allows you to follow easily regardless of your background.

Bret puts forth the facts and invites you to doublecheck them via the in-depth resources he cites at the end of each chapter. The chapters on energy describe what energy sources have been and are used by humans, and reveals that some energy types take another form of energy for their production, highlighting that the former entities are not primary sources of energy. Then he carefully introduces climate, highlighting the link between human emissions and climate and the importance of emissions and climate to the earth's energy balance. Unique and creative are the inclusion of a "toy model" of planetary climates and three historical chapters designed to help you see the whole global picture, complete with impacts on humanity throughout time.

From the past through the present and on into the future, through twelve chapters abundantly packed with information, Bret guides the reader to take into consideration historical, social, political, economic, and ethical concerns—including historical victories and defeats—about energy and climate. Chapter by chapter, he skillfully expounds the issues to be considered in solving our energy/climate dilemma. But as a master educator, he gives you the information, allowing you to ask questions and draw your own conclusions. Will our global society can solve problems regarding a potential or impending energy shortage and/or climate alteration? And if we can, how? Will we find answers through technology, energy conservation, carbon sequestration and/or discovery of energy substitutes? These are the kinds of questions you ask yourself, using the information provided as a springboard for further research and reflection.

In the end, all who take the time to read this book will have given themselves a gift: a gift of knowledge regarding current society's greatest physical challenges. These are difficult

problems to solve, which will take all of us across the globe working together to make the changes that we deem necessary to balance the energy/climate nexus and preserve valuable natural resources. This book is "great food for thought" to support a perfect classroom unit(s) and/or to serve as a community awareness builder. Bret tells just the kind of story, presented and backed with hard scientific data, that will encourage all to start talking about the issues, continue to learn about them, and even be moved to take action.

As a specialist in energy education, I have read and digested countless energy and climate change articles, books, and classroom lessons. Most are so similar that it is easy to read through them without really grasping the content. *The Energy–Climate Continuum* is refreshingly different. Bret uniquely addresses the history of societies in this book, discusses energy sources most would not even think about as energy sources, and challenges you to think about what if anything can we learn from past societies and how can all this factual information be used to solve any future energy and climate problems.

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