

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

The Prairie Naturalist

Great Plains Natural Science Society

12-2017

ENERGY SPRAWL SOLUTIONS

Nicola Koper

Follow this and additional works at: <https://digitalcommons.unl.edu/tpn>



Part of the [Biodiversity Commons](#), [Botany Commons](#), [Ecology and Evolutionary Biology Commons](#), [Natural Resources and Conservation Commons](#), [Systems Biology Commons](#), and the [Weed Science Commons](#)

This Article is brought to you for free and open access by the Great Plains Natural Science Society at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in The Prairie Naturalist by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

ENERGY SPRAWL SOLUTIONS. Edited by Joseph M. Kiesecker and David E. Naugle. 2017. Island Press, Washington, D.C., USA. 171 pages. \$70.00 (hardcover), \$35.00 (paper). ISBN: 978-1-61091-722-3.

Energy sprawl affects all the major conservation issues of our age, from habitat loss and fragmentation to anthropogenic noise and climate change. As such, minimizing and solving its associated problems should be a key focus for conservation biologists. Kiesecker and Naugle provide an impressive and compact book that focusses on solving environmental and social problems likely to result from a transition from non-renewable to far less efficient renewable energy sources.

Energy Sprawl Solutions summarizes numerous relevant peer-reviewed academic papers, and outlines management and planning implications of each one, ultimately resolving these into fairly clear prescriptive recommendations for moving forward. The book includes many case studies from across the world and highlights effects of various energy sources, although there is an emphasis on popular renewables such as wind, solar and biofuels. It is formatted into three sections: a (frankly terrifying) outline of the current problem, case studies that illustrate potential solutions, and recommendations for how to make best practices common practices.

In general, all chapters, including the excellent and thoughtful foreword by Peter Kareiva, are clear, concise, accessible and well written. The book incorporates several creative and intuitive figures that contribute to the reader's understanding of the concepts (though the black-and-white photos are rather less useful). The overview and concluding chapters are effective in drawing together disparate case studies from varied authors into a meaningful whole with a memorable take-home message. The book, overall, is particularly insightful from a geospatial planning perspective.

While all chapters present thoughtful and often creative ideas, I particularly enjoyed Chapter 2, "The Challenges of a Green Future", by Gert Jan Kramer, who integrates history, philosophy and psychology in the discussion of planning and modelling for assessing relative costs and benefits of alternate energy scenarios. Chapter 6, "Planning for Offshore Oil", by Eduardo Klein and his colleagues is among several welcome chapters that illustrate energy development issues in South America and other relatively understudied geographic regions.

The book's goals are lofty, and while it accomplishes a great deal, it is not surprising that it cannot achieve everything. Although the authors aim to develop "scalable and lasting solutions", most of their recommendations, which emphasize long-term planning and policy development, would be ineffective or difficult to implement at smaller scales. Indeed, effective implementation of the ideas in this book would require buy-in from governments and collaboration among multinational corporations, and while the authors make

compelling arguments for the benefits of doing so, political realities may well interfere with these goals. The reader is left with the frustration that it seems unlikely that smaller-scale management, or even planning exercises by individual companies, could contribute significantly to energy sprawl solutions.

Nonetheless, *Energy Sprawl Solutions* provides an excellent and thought-provoking resource. It will be useful for a wide variety of audiences, from policy makers and managers to academics and the general public. It is scientifically current while also more efficient as a resource than the original academic sources. It would thus also make a compact textbook to accompany a university course in sustainable energy systems or development by design. Perhaps the best illustration of my respect for this book is that I plan to incorporate it into several of my own graduate teaching units, and have recommended it to colleagues; I hope to see it widely used so that its ideas might be put into practice.—*Nicola Koper, Professor of Conservation Biology, Natural Resources Institute, University of Manitoba, Winnipeg, Manitoba R3T 2M6, Canada.*