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Geofuels

Our energy use and its consequences (including climate change) motivate some of the most contentious and complex public debates of our time. Although these issues are often cast in terms of renewable versus nonrenewable energy, in reality both depend on finite Earth resources. The evolution of the Earth itself therefore offers a uniquely illuminating perspective from which to evaluate alternative pathways toward energy and environmental sustainability. *Geofuels: Energy and the Earth* systematically develops this perspective using informal, nontechnical language laced with humor. It is well suited to a broad readership, ranging from beginning university students to lifelong learners who are interested in how the Earth's past will influence their own future. It also provides simplified explanations of controversial topics, such as energy return on energy investment, peak oil, and fracking. The focus throughout is on building a sound physical understanding of how natural resources constrain our use of energy.

Alan R. Carroll is a geologist with more than thirty years of experience in academic research and the energy industry. He is currently a professor at the University of Wisconsin–Madison, where he conducts research on sedimentary basins, and he is internationally known for his contributions to the geology of ancient lakes and the tectonic evolution of western China. He also teaches a popular energy resources course. He is a founding member of the Wisconsin Energy Institute and a member of the Nelson Institute for Environmental Studies, where he is a part of the Energy Analysis and Policy faculty. Carroll has worked as an exploration geologist for Sohio Petroleum and as a petroleum geochemist for the Exxon Production Research Company, and he continues to maintain active contact with the petroleum industry through his consulting company, Geofuels LLC. He is a Fellow of the Geological Society of America, a past associate editor of the *American Association of Petroleum Geologists Bulletin*, and a member of the American Geophysical Union and International Association for Limnogeology. He is also an avid pilot who enjoys cross-country air racing in an award-winning experimental airplane that he built himself.

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Energy and the Earth

ALAN R. CARROLL
University of Wisconsin



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