Julian Darley's "High Noon for Natural Gas", subtitled "The New Energy Crisis", [Chelsea Green Publishing Co. ISBN 1-931498-53-9 (pbk)], is at once an important, daunting and sobering work. Darley, a British environmental researcher living in Canada, is author of numerous websites including http://www.postcarbon.org. His central thesis is that the dream of the high-energy-use community - that natural gas will provide a rescue for mankind from the pitfalls of dependence on oil - is both short-sighted and ultimately delusional.

The facts are that

- discovery of oil reserves worldwide have long-since peaked;

- rates of extraction of oil worldwide have plateaued;

- discovery of conventional, economically extractable gas worldwide has peaked; and

- rates of extraction of natural gas appear to be approaching their maximum, estimated to peak, circa 2010-20; and

- in each of the above, the United States is well ahead of these curves.

Further, because natural gas is not a liquid, occupies roughly a thousand times the volume of an energetically equivalent amount of petroleum, requires massive pipelines or containers to transport it, and substantially different equipment to combust it, gas requires a different infrastructure and is not readily substituted for oil as a source of energy. For some energy requirements, such substitutions are just not practical. Despite these facts, plans and projections for the world industrial society's increased energy-demand continue unabated. Darley divides his book into three main sections:

- the geological, geographical, physical and chemical basis of gas discovery, extraction and transportation;

- the political responsibility for, and historical irresponsibility of, corporate and national policies directed at exploiting oil and gas reserves as though their supply were limitless, which it manifestly is not;

- the alternatives the world community of carbon-fuel addicts faces in the immediate to near-term range from grim, to grimmer, to grimmest. As our highly energy-consumptive cultures approach running on empty, the prospect of our achieving a soft-landing is dim indeed given the history of our species' legendary failures to address looming difficulties in lieu of the quest for current expedience and profit.
The first section of this work is difficult, somewhat technical reading that might be skipped except that reference either to it or the adequate index will be required fully to appreciate the succeeding sections.

The second will be wonderfully satisfying for those whom Darley deems "the walking worried, those who realize that if we wait until the last minute, it will be impossible to build a low-energy [use] infrastructure to replace the high-energy one we have now." The shabby record of mankind's widespread and endemic neglect of resource conservation and management is clear. The political and economic systems of so-called advanced societies seem to have learnt little from the litany of self-destructive behaviors evinced by failed and vanished civilizations.

The last section deals with plausible alternative approaches at this exceedingly late date in the history of the last two centuries' carbon-fuel orgy: nuclear fission or fusion, solar sources and social and political reorganization to effect sustainable levels of energy consumption. Many of the latter will be familiar to those who lived in the oil-shocks of the 70s or recall the valiant, doomed efforts of Barry Commoner and Jimmy Carter to awaken the slumbering. Ultimately Darley concludes the only viable permanent alternative is contraction: changing the way our species lives in and on this planet to one that is consistent with the sustainable, steady-state energy supply from the sun.

Realistically, proposed alternatives Darley details require massive reconfiguration, not only of the energy production and transportation infrastructure, in the case of short-term, stopgap measures, and politically and economically revolutionary ways of reorganizing not only 'western' but worldwide societies in the long-term. The outlook for discovering or creating, in a timely manner, both the political will and the economic mechanisms to enable utilization of alternative energy sources sustainably is bleak indeed.

Only bleaker are the prospects, should we fail to do so, for more wars of resource acquisition, and more starvation and deaths from exposure to global meteorological elements and events already exacerbated by the effects of the failure of our stewardship of the environment.

This is a not a happy, pleasant book to read; but it is well documented, persuasive and ultimately convincing. Something HAS to be done, immediately if not sooner, about our industrial society on this planet, else we will join the Easter Islanders and the Norse colonists of Greenland in whatever history is written, sung or told by the survivors of our folly.

(c) Copyright 2005 by AxisofLogic.com