

3. *ibid.*, p.173.
4. L. Walras in Rugina, *op.cit.*, p.59
5. I. Prigogine and I. Stengers, *Order Out of Chaos*, Fontana, London, 1984, p.295.

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**Social Costs of Energy Consumption by Olav Hohmeyer**

(Springer Verlag, Berlin, 1988) pp.xii + 126, Paper DM78, ISBN 0 387 19350 2

Olav Hohmeyer and his collaborators present a detailed assessment of the economic externalities which have arisen, and are expected to rise, in the generation of electricity in West Germany over the period of 1975-2030. In an accessible, highly structured and compact manner, the book presents a wealth of detailed economic information on differences between private commercial costs and social or economic costs of: (a) fossil fuel power; (b) nuclear power; (c) wind power; and (d) solar power. The book is based on a report prepared by the Fraunhofer Institute for the Commission of the European Communities.

When externalities in electricity generation are considered, it becomes evident that the economic production costs of both nuclear and fossil fuel power are in excess of the commercial production costs, mainly because of adverse environmental spillovers. At 1982 Deutschmark prices (then approximately 2.5 marks per Australian dollar), the order of excess is 4-9 cents/kWh in the case of fossil fuels, and 5-12 cents/kWh in the case of nuclear energy (excluding breeder reactors). The excess is additional to paid-up costs of fossil and nuclear power of approximately 10 cents/kWh. These figures are subject to increases in real terms as time progresses (although no such increase has been allowed in the analysis for the excess). By contrast, real production costs per kWh of wind and solar energy have fallen rapidly in recent years with further — albeit asymptotic — reductions imminent.

The rising cost of non-renewable electricity generation and falling costs of renewable generation is expected to make wind energy commercially viable in West Germany before 1995, and solar energy before the year 2015. These dates can be brought forward about a decade by intervention aimed at internalising the external costs of non-renewable power generation. Accordingly, wind energy could already present a competitive alternative to non-renewable processes. In the absence of intervention, misallocation arises because of over-usage of electricity at prices in which environmental costs remain unaccounted, and because decisions on new generation plant will not then, for some years, exploit the advantages wind power has to offer.

Olav Hohmeyer's study is required reading for planners of electricity supplies. It is also highly recommended to students as an up-to-date case study illustrating the contribution which the discipline of environmental economics can make in real-world decision making. Finally, the book is a pointer for the direction which research and development in this field might take. Coal and uranium are presently important sources of income in Australia. Besides, fossil fuel electricity generation is commonplace. However, with new energy horizons in sight, major

adaptations may be required in the foreseeable future. The focus on these new horizons is brought home by the recent political impact of the so-called greenhouse effect. If Australia is to be prepared, then prudence suggests an increased R&D emphasis on both wind technology and solar collection and storage technology. The prospects for the latter ought to entice us in our sunburnt country.

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**The Brittle Rim: Finance, Business and the Pacific Basin** by *M. T. Daly and M. I. Logan*  
(Penguin Books, Melbourne, 1989) pp.272, \$24.99, ISBN 0 140 12095 5 Pbk.

*The Brittle Rim* provides an important bridge between wishful thinking and myths about a global economy, and stark predictions of disaster from unknown forces. It is, therefore, essential reading for business people, political leaders, or experts who are interested in, and concerned with, globalisation and interdependence and their meaning for both international and domestic policy.

The book provides some much-needed background on events on the Asian Pacific Rim as they have, quite logically, developed since the end of World War II. The story moves along well, with many facts being given to substantiate what the authors are saying. That the writers are Australians, rather than Europeans or Americans, makes this work of special value. Their view of the Asia/Pacific areas through the eyes of a neighbour, rather than a stranger, provides rather interesting insights. It would have been nice if the authors had spent some more time on Australia and its role on the global stage, rather than treating this as almost irrelevant.

The general thesis of the work is interesting, but needs careful appraisal. Daly and Logan tell us that money and the modern banking system are the essence of the new world order. Perhaps so; perhaps not. In a free society, one can attach importance to whatever one wishes, and what is more or less important in a given situation is, in any case, usually relative. It is a little like a blind man touching an elephant, with what he 'sees' depending on what part of the elephant he touches. It is a little like trying to diagnose what caused 'freedom' to break out in Eastern Europe. Some say food shortages caused it; others say it was caused by a craving for consumer gadgets; still others say it was all due to the new availability of information made possible by modern communications; and still others are hopeful that it was propelled by a wish for freedom and democracy.

Neither the changes in Asian Newly Industrialised Countries, nor those in Eastern Europe, can be attributed to any one cause for it is a host of interrelated events that are shaping the ever more closely interwoven web of relations between nations, their economies, and societies. Whether the present banking and financial system should be considered a symptom or a prime cause of global changes can be questioned. Daly and Logan clearly believe the latter. To make sense of the hundreds of variables involved in globalisation and interdependence, the authors have had to do what all researchers in this field have had to do;