



Books received

edited by Robert Lilljequist

Mineral and Energy Policy Centre and Raw Materials Group, *South African Minerals Yearbook 1997*, African Mining, PO Box 48420, Roosevelt Park 2129, South Africa. Fax: +27-11-888 1727, World-Wide Web: <<http://www.mining.co.za>>. ISBN 0 620 22036 8, 1997, 160 pp.

Dramatic changes in the structure of South Africa's mining industry in the past five years are discussed in one volume researched by the Johannesburg based "think tank" MEPC, chaired by Cyril Ramaphosa, the former secretary general of the ANC and the Swedish consultancy RMG.

Richard Serjeantson editor, *Chinese Metals Directory*, Metal Bulletin Books Ltd, Park House, Park Terrace, Worcester Park, Surrey KT4 7HY, UK. Fax: +44-181-337 8943. World-Wide Web: <<http://www.metbul.com>>. ISBN 1 900663 15 5, 1997, 199 pp.

The volume edited by a Chinese professor sheds considerable light on the current status of the Chinese metal industry. The book covers not only the traditional mining and metal industries but extends also into industrial minerals and ferro-alloys. It is set to become a standard in its area.

Joyce B. Griffiths editor, *Central & East European Minerals Directory*, Industrial Minerals Information Ltd, Park House, Park Terrace, Worcester Park, Surrey KT4 7HY, UK. Fax: +44-181-337 8943. ISBN 1 900663 06 6, 1996, 262 pp.

Information from the Central and East European industrial minerals sector has not been readily available. This book

aims at filling that gap, it contains presentations of 650 companies in 22 countries, including also the Central Asian republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and the Caucasian republics of Georgia, Armenia and Azerbaijan.

Ajoy K Ghose, *Mining on a small and medium scale – a global perspective*, Intermediate Technology Publications Ltd, 103–105 Southampton Row, London WC1B 4HH, UK. ISBN 1 85339 401 7, 1997, 296 pp.

This volume collates the proceedings of the Global Conference on Small and Medium Scale Mining held in Calcutta in 1996. The articles are divided into 6 sections: (1) Small and medium scale mining-issues management; (2) Environmental perspectives; (3) Technical developments; (4) Sharing experience world wide; (5) Economic perspectives; and, (6) Miscellaneous papers. Small organised, artisanal, informal mining is of growing interest for the World Bank and other international organisations. Not only can this activity create job opportunities outside the large cities, but it is of equal interest to hinder the continuing environmental damaging caused by the not organised mining activities.

National Institute of small mines (NISM), *Global conference on small/medium scale mining, India*, December 2–4, 1996. 19, Prince Anwar Shah Lane, Calcutta 700 033. Phone/fax: +91-33-473 9542. E-mail: <partha.nism@access.net.in>

The National Institute of Small Mines (NISM) is a service oriented techno-scientific, non-profit body registered on April 1, 1989 under West Bengal Societies Registration Act, 1961. It was proposed jointly with Small Mining International (SMI), Canada in the same forum in Namundi/Jamshedpur/Calcutta in July 27–31, 1987. It is planned, constitutionally, as the mine owner's organisation to look after their enlightened interest. The large number of small mines (about

9 000) distributed all over India is an important source of non-inflationary productive employment and a positive contributor to the local economy.

Price Waterhouse, *Canadian Oil and Gas Survey 1997*. Price Waterhouse, Royal Trust Tower, Suite 3000, P O Box 39233, STN BRM B, Toronto ON, M7Y 6V1, Canada. Fax: +1-416-365-8215, E-mail: <worldmininggroup@canada.notes.pw.com>.

The 1997 Price Waterhouse Canadian Oil and Gas Survey provides an outlook of the Canadian Petroleum Industry and summarizes financial and operating information of the top 100 Canadian public companies and 15 income trusts.

Eco Andino, Revista del Centro de Ecología y pueblos andinos (CEPA). Calle Toledo 140 esq. Tomás Frías (zona sud), Casilla 434, Oruro, Bolivia. Fax: 591-(0)52-60730. E-Mail: <cepa@utonet.bo> This new journal was founded in 1996.

Sweden International, *Special Steel Survey: Jernkontoret 1747–1997*, the Swedish Steel Producers' Association, P O Box 1721, S-111 87 Stockholm, Fax: +46-8-611 20 89, 82 pp.

Stefan Hellmer, *Competitive strength in iron ore production*, Department of Business Administration and Social Sciences. Division of Economics. Luleå University of Technology, S-971 87 Luleå, Sweden. Fax: +46-920-72035. E-mail: <stefan.hellmer@ies.luth.se>, 229 pp.

This dissertation consists of two papers. The first analyses the market structure of the European market for iron ore and uses the concept of conjectural variation in order to describe the competitive strength of individual countries in this market.

The second paper broadens the analysis to include the global market. The key issue here is to explain LKAB's survival after the crisis in the late 1970s. The paper concludes that LKAB maintains a

strong position in both the European pellets market and the market for Direct-Reduction pellets in Asia and the Middle East. This position has been attained and maintained thanks to LKAB's rich deposit of magnetite ore and product development.

Jack W. Bond, *How EC and World Bank policies are destroying agriculture and the environment – a European and Third World perspective*, AgBé Publishing, PO Box 9125, 1800 GC, Alkmaar, Holland. ISBN 981 00 7101 9, 152 pp.

In recent years it has become apparent that agricultural policies forced upon farmers are inflicting considerable damage on the environment, on farming, and on the character of rural life in general. This book analyses the relationships between agricultural policies and the problems of modern agriculture, which lead, in turn, to environmental problems such as poisoning of wildlife and intolerable high chemical residues in food and drinking water. The book indicates what could be done to get agriculture and rural development back on the right track. The Author is a retired international civil servant who, after a career as a rural development adviser, is now active as an independent consultant (P O Box 882, Hilversum, Holland).

Brian Mackenzie, Francisco Ortiz, and Michael Doggett, *Economic potential of mineral exploration in Chile: evidence from the historical record*, Technical paper No. 15, Centre for Resource Studies, Queen's University, Kingston, Ontario, ISBN 0 88757 130 1, 221 pp.

The analysis of economic base metal and precious metal deposits discovered in Chile during the period 1970–92 suggests that there is every reason to believe that great potential exist for further wealth creation in Chile through successful exploration and mine development. Chile is shown to be very competitive relative to Australia and Canada. The level of exploration funding required in Chile to be confident of discovering at

least one economic deposit varies from 42 MUSD to 54 MUSD. The average exploration expenditures required to find and delineate an economic deposit are 10 times higher in Australia and 3 times higher in Canada. The average net present value for 57 deposits evaluated in Chile under "base case" conditions is 125 MUSD. The economics of mineral exploration in Chile, as elsewhere in the world, critically depends on finding exceptional giant ore bodies. The study demonstrates that there is no such thing as a "typical" deposit. In conclusion Chile will continue to be an attractive environment for investment in exploration in the foreseeable future.

Verlag Glückauf GmbH, *Jahrbuch 1997 (104. Jahrgang) – Bergbau, Erdöl und Erdgas, Petrochemie, Elektrizität und Umweltschutz*, Verlag Glückauf, Postfach 18 56 20, D-45206 Essen, Germany. Fax: +49-02054-924 109. ISBN 3 7739 0648 X, 1201 pp.

This is a handbook in German on energy and raw materials.

David Godden, *Agricultural and resource policy – principles and practice*, Oxford University Press, GPO Box 2784Y, Melbourne 3001, Australia. Fax: (03) 9646 3251. ISBN 019 554023 9, 408 pp.

This book explains how to analyse agricultural and natural resource policy with particular emphasis on Australia. The author aims to develop a systematic, theoretical framework that integrates economic efficiency and public choice analysis. The interaction of the agricultural and resources sector with the rest of the economy, and the importance for agriculture of policies outside the sector are evaluated.

Michael J. Fox, *An assessment of resource studies in Canadian schools*, Technical paper No. 53, Centre for Resource Studies, Queen's University, Kingston, Ontario, ISBN 0 88757 130 1, 73 pp.

In interviews with 296 school teachers from all over Canada, it was discovered that minerals and fuels received the least

amount of classroom instructional time. Teachers suggested that they avoided the minerals and fuels sectors because of their lack of experience in the area, as well as their belief that students were simply not interested in them. Of the 306 students interviewed only 53 per cent included mining as one of Canada's major resource sectors. As much as 13 per cent of the students were unable to identify any of Canada's natural resources. The most shocking result of this section of the interview is that one in four Canadian students interviewed were unable to name a single mineral found in Canada.

David Gulley, John Webster and Alex Morrison, *Reserve disclosures and the competition for capital*, Price Waterhouse, Royal Trust Tower, Suite 3000, P O Box 39233, STN BRM B, Toronto ON, M7Y 6V1, Canada. Fax: +1-416-365 8215, E-mail: <worldmininggroup@canada.notes.pw.com>, 1997, 15 pp.

Sini Autio (ed.), *Geological Survey of Finland, Current Research 1995–1996*, Geological Survey of Finland. Special Paper 23, GSF, P.O. Box 96, FIN-02151 Espoo, Finland, E-mail: <sini-autio@gsf.fi>, ISBN 951 690 651 6, 196 pp.

Current research at the GSF is outlined in 22 different articles, e.g. geology and exploration at the Vihanti zink deposit, the Kälviä ilmenite occurrence and the Kutemajärvi gold deposit. Large gold nuggets from Finnish Lapland and carbonate rocks in Uusimaa are investigated, and the history of mining activity 1530–1995 in Finland is reviewed by Kauko Puustinen. Also new maps are represented by an excellent digitized geological map of Finland. Geophysical maps of central and northern Fennoscandia of the so called "Mid-Norden Project" are presented. Appended are gravity and aeromagnetic anomaly maps of Northern and Central Fennoscandia. This well edited description of information and advances within the geology and mining in Finland is highly recommended.

Mary Louise McAllister and Cynthia Jacqueline Alexander, *A stake in the future: redefining the Canadian mineral industry*, Centre for Resource Studies, Queen's University at Kingston. UBC Press, 6344 Memorial Road, Vancouver, BC V6T 1Z2. Fax: +1-800-668 0821, E-mail: <orders@ubcpres.ubc.ca>. ISBN 0 7748 0603 6, 224 pp.

In 1993, the Whitehorse Mining Initiative (WMI) gathered together people with different world views, ideological perspectives, and interests. Participants were to consider a new way of dealing with the country's natural resources – a long term plan for the sustainable development of mineral resources. WMI was named after the city where the new plan was announced. The polycentric nature of the problems facing the mining industry required the adoption of an integrative resource management approach. Among the issues facing industry are human resource development, taxes and charges, environmental assessment and permitting, the environmental regulatory process, land access, land claims, and Aboriginal self-government. Public perceptions about the industry are generally misinformed and outdated.

Price Waterhouse, *Canadian Mining Taxation*, Price Waterhouse, Royal Trust Tower, Suite 3000, P O Box 39233, STN BRM B, Toronto ON, M7Y 6V1, Canada. Fax: +1-416-365-8215, E-mail: <worldmininggroup@canada.notes.pw.com>, 70 pp.

According to some estimates, the 1990s have seen roughly 60 per cent of the earth's land surface opened up to mineral exploration as a result of changing economic policies. In conjunction with this new world competition, both developed countries and emerging nations have been critically examining their mineral taxation regimes. For the most part, Canada's mining tax system is considered to be internationally competitive. As a basic aid to understanding Canadian mining taxation, this guide summarizes the main

features of the Canadian income and mining tax systems currently in effect throughout the country. Tax planning tips are also provided to give the reader some ideas as to tax-effective methods that can be used in the course of planning a project.

Goode, R., Lewis, P., and van der Merwe, S., *Employment strategy for the mining sector – report to the Department of Labour to support the development of an employment strategy*, Minerals & Energy Policy Centre, P O Box 395, WITS, 2050, South Africa. Fax: +27 11 403 8023, E-mail: <Info@mepc.org.za>, 50 pp.

Mineral Policy Institute Report, *BHP Company Profile – an examination of BHP's global record in the areas of environmental protection, relationships with indigenous people, worker health and safety and related issues*, MPI, P O Box 21, Bondi Junction, NSW 2022, Australia. Fax: +61-2-9386-1497, E-mail: <mpi@mpi.hydra.org.au>, 42 pp.

The Mineral Policy Institute is an Australian based non-profit, environmental advocacy and research organisation dedicated to researching and monitoring the activities of companies in the minerals field, and advocating for improvements in environmental standards in the countries in which companies are operating for better return to the public and the protection of human rights. The report provides a guide to the performance of BHP up to the present time (1997).

Polska Akademia Nauk, *Gospodarka Surowcami Mineralnymi*, Kraków 1996, Tom 12-Zeszyt 4, ISSN 0860 0953, 7 Wybickiego St., 30-950 Kraków 65, P O Box 49, Poland, Fax: +48 12 322 068, e-mail: <smakowsk@min-pan.krakow.pl>, pp. 608-747.

From the contents: "The problems of utilization of accompanying mineral raw materials in Polish brown coal mines", "Mineralogical compositions and technological parameters of processing wastes

from the quartzitic sandstone deposit Bukowa Góra", "Effect of microstructural development of dolomite facies", "Fundamental principles for a sustainable energy supply", "The use of palmstone charcoal in the sintering of Baharia iron ore".

Ministry of Environment Protection, Natural Resources and Forestry, *Polish Minerals Yearbook 1995*, Polish Academy of Sciences, 7 Wybickiego St., 30-950 Kraków 65, P O Box 49, Poland, Fax: +48 12 322 068, e-mail: <smakowsk@min-pan.krakow.pl>, 476 pp.

This first English version of the Polish Minerals Yearbook contains economic data on 112 mineral commodities in Poland for the period 1991–1995. The information includes production, trade and consumption of minerals and statistics tables covering the last five years. This can be regarded as a vital contribution in the ongoing process of Poland's integration with the EU.

Polska Akademia Nauk, *VI Konferencja – Aktualia i Perspektywy Gospodarki Surowcami Mineralnymi*, Polish Academy of Sciences, 7 Wybickiego St., 30-950 Kraków 65, P O Box 49, Poland. Fax: +48 12 322 068, e-mail: <lewicka@min-pan.krakow.pl>. ISBN 83 901987 6 2.

Mineral Resources Information Center, Metal Mining Agency of Japan, *Structural reform of the mining industry in Asia and the Pacific region, February 1997*, 61 pp.

The mining industry within the PACRIM nations has undergone several significant structural changes in the last decade and more are anticipated in the first decade of the 21st century. Perhaps no change is more dramatic than the shift in exploration and development funds to Chile and Indonesia which has been brought by sound mineral development policies and by the discovery and development of several large world class mineral deposits in these countries. A total of 87 companies are included in the survey.

Crawford, R.M.M., *Disturbance and recovery in Arctic lands – an ecological perspective*, Kluwer Academic Publishers, P O Box 17, 3300 AA Dordrecht, The Netherlands, ISBN 0 7923 4418 9, 621 pp.

Arctic ecosystems are subject to many forms of anthropogenic stress and disturbance; of these, climate change as a result of the enhanced greenhouse effect perhaps will affect uniquely the entire arctic region. Climate change is of course not a new phenomenon, neither in the Arctic nor elsewhere on the globe. The relatively recent geological past has seen general global cooling at the transition from the Tertiary to the Quaternary (ca. 2.4 million years ago) followed by the repeated climate fluctuations associated with the alternating glacial and interglacial stages of the Quaternary. Palaeoecological evidence from the Arctic and from adjacent lower latitude areas provides a record of how arctic biota responded to these changes; this record can provide insight into the likely response of these biota to any future climate changes.

Ivan Roberts, *Australia and the next multilateral trade negotiations for agriculture*, Abare Research Report 97.6, ABARE, GPO Box 1563 Canberra 2601 Australia, Fax: +61-2-6272 2. ISBN 0 642 26610 7, 100 pp.

Department of Mines and Energy Queensland, *Queensland minerals and energy review 1996–1997*, Department of Mines and Energy, 61 Mary Street Brisbane Qld 4000. Fax: +61-7-3229 7770, 165 pp.

Patrik Söderholm, *Two Studies on Fuel Choice in Power Generation*, Department of Business Administration and Social Sciences. Division of Economics. Luleå University of Technology, S-971 87 Luleå, Sweden. Fax: +46-920-72035. e-mail: <Patrik.Soderholm@ies.luth.se>, 193 pp.

This dissertation consists of two studies. The first one estimates the degree of price-induced interfuel substitution between fossils in West European power generation. The degree of short-run substitution is found to be substantial. The investigation also indicates that public policies and changes in load factors have had significant impacts on fossil fuel choices in West European power generation.

The second study explores what factors have been the most important in determining the choices between different electricity supply options in Zimbabwe since 1980. It is shown that in the early 1980s these choices were dictated by a self-sufficiency policy. However, the step towards least-cost alternatives was substantial in the late 1980s and early 1990s.

UNCTAD, *United Nations conference on trade and development – management of commodity resources in the context of sustainable development: social impacts of mining*, Papers presented at the Asian/Pacific workshop on managing the social impact of mining, Bandung, Indonesia 14–15 Oct. 1996. 82 pp.

Institute of Mining Research, *Twenty-eighth Annual Report, 1996*, University of Zimbabwe, P O Box MP 167, Mount Pleasant, Harare, Zimbabwe. Fax: +263-4-336418, 52 pp.

A progress report by O. Maponga, deals with the mineral exploration and mining investment – the experiences of Australian mining companies offshore. Another paper describes small scale mining and the environment in Zimbabwe: the case of alluvial gold panning and chromite mining. ■

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