



Metals Despatch

Newsletter of the International Metals Study Groups

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SEMINAR ON BASE METALS MINING & INVESTMENT IN SOUTHERN AFRICA IN WINDHOEK, NAMIBIA

The International Lead and Zinc Study Group (ILZSG) and Namibian Government, in conjunction with the Namibian Chamber of Mine and Common Fund for Commodities, have agreed to hold an International Seminar on Mining Investment for Base Metals in Southern Africa in Windhoek, Namibia from 3 to 7 June 2007.



The Seminar will include:

- Presentations by government and industry representatives from Angola, Botswana, DR Congo, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe
- Presentations from major mining companies operating in the region
- In depth examination of metals resources in Southern Africa
- Field trips to local mines/plants, including Skorpion
- Discussion of the principal environmental and sustainability issues that impact on mining
- An overview of the latest trends in the global metals markets.

For a detailed programme and/or further information, please contact the Secretariat of the International Lead and Zinc Study Group on tel: +351 21 359 2425, fax: +351 21 359 2429 or email: root@ilzsg.org

COPPER FORECAST

During its 28-29 September meeting in Lisbon ICSG member countries reviewed the current outlook for trends in World supply and demand for copper during 2006 and 2007 and issued the following forecast:

- Global **copper usage** is forecast to rise by 3.3% to 17.16 million tonnes in 2006. Growth is anticipated in all major consuming regions
- Global **copper mine output** is expected to rise by 1.9% to 15.17 million tonnes (Mt) in 2006. In 2007 an additional increase of about 1 million tonnes is expected
- Global **refined copper metal production** in 2006 is predicted to increase by 5.4% to 17.4 Mt. In 2007 a further increase of 3.8% to 18.06 million tonnes is forecast
- ICSG anticipates that the **copper market** will have a modest surplus in 2006 of about 240,000 tonnes (1.4% of annual usage). In 2007 the surplus is expected to fall to around 180,000 tonnes. Preliminary projections indicate potential for a larger surplus in 2008.

For further details of the outcomes of the ICSG meetings or questions on the market outlook please email Ana Rebelo at rebelo@icsg.org

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NICKEL FORECAST

During its 16th Session held in Lisbon on 2-4 October INSG reviewed the current outlook for trends in World supply and demand for nickel during 2006 and 2007 and issued the following forecast:

- Global **primary nickel usage** is forecast to rise by 10.5% to 1.37 million tonnes in 2006 and to 1.45 million tonnes in 2007. The key factor for 2007 remains Chinese demand for nickel and nickel-containing products
- Global **primary refined nickel production** in 2006 is predicted to increase by 4.6% to 1.35 Mt. In 2007 a further increase of 7.4% to 1.45 million tonnes is forecast
- INSG also discussed **market trends** and noted that the production of high nickel-content stainless steels had declined in most parts of the world in the second half of 2005. However, stainless steel production improved at the start of 2006 and remained at record high levels, increasing sharply the usage of primary nickel.

For further details of the outcomes of the INSG meetings or questions on the market outlook please email Sven Tollin at sven.tollin@insg.org

UNITED NATIONS METALS POLICY INITIATIVES

Recently a number of United Nations policy developments that may affect non-ferrous metals in general and lead and cadmium in particular have begun to gather pace.

During the last ILZSG Session Dr. David Wilson, Director of the Lead Development Association International (LDAI), provided a synopsis of activity in each forum. The United Nations Economic Commission for Europe (UNECE) Heavy Metals Protocol Task Group and the United Nations Environment Programme (UNEP) are both examining the case for further environmental regulation of lead.

The Intergovernmental Forum on Chemicals Safety (IFCS) also discussed heavy metals during a meeting held in Hungary in September 2006. IFCS is a consultative and advisory body that was first convened in 1994 by the World Health Organisation, International Labour Organisation and UNEP.

Dr. Wilson cautioned the Study Group that there was a trend developing among UN agencies to potentially classify lead contained in traded products as a trans-boundary pollutant. This could have serious implications for the international trade in lead. The ILZSG Secretariat will monitor developments in these different arenas and will report regularly to member countries.

Email ian_burrell@ilzsg.org for more details.

LEAD AND ZINC FORECAST

The current outlook for World and Western World supply and demand for lead and zinc was presented during ILZSG's 51st Session in Lisbon on 4-6 October and the following forecast was published:

- Global **lead usage** is forecast to rise by 3.3% to 8 million tonnes (Mt) in 2006. In 2007 further growth of 2.6% to 8.21 Mt is anticipated
- Global **lead mine output** is predicted to rise by 1.3% to 3.38 Mt in 2006 and by 8.8% to 3.68 Mt in 2007
- Global **refined lead metal production** in 2006 is predicted to increase by 6.1% and by a further 3% in 2007, driven by further anticipated rises in China of 14.8% in 2006 and 4.5% in 2007
- ILZSG anticipates that global **usage of refined zinc metal** will increase by 3.9% to 11.06 Mt in 2006. In 2007 further growth of 2.6% to 11.35 Mt is anticipated
- It is expected that global **zinc mine output** will increase by 2.1% to 10.36 Mt in 2006 and by 7.3% to 11.12 Mt in 2007 influenced by a number of mine openings, re-openings and expansions
- Global **production of refined zinc metal** is forecast to increase by 4.3% in 2006 and by a further 4.9% in 2007.

For further details of the outcomes of the ILZSG meetings or questions on the market outlook please email Paul White at paul_white@ilzsg.org

CFC/ILZSG HOT DIP GALVANIZING PROJECT MISSION TO SHANGHAI

Between 23 and 25 October ILZSG participated in a Common Fund for Commodities (CFC) project mission to Shanghai in China. The purpose was to review progress in the project to develop zinc usage and transfer technology that has been agreed between the CFC, ILZSG and the International Zinc Association (IZA).

The Hot Dip Galvanizing (HDG) project aims to:

- Improve technology for HDG in the developing world
- Improve the energy efficiency of production
- Improve the galvanizing design efficiency of products
- Spread best practice relating to Health, Safety and the Environment
- Improve the skills base of shop floor workers and management.

The CFC has pledged grant and loan funding amounting to \$2.3 million while the IZA and its local Chinese partner - the Chinese Galvanizers Association (CGA) - have pledged a further \$1.1 million to the project.

CFC Project Manager Eltha Brown and ILZSG Head of Economics and Environment Ian Burrell visited one of the four HDG plants participating in the project and held discussions with the IZA and CGA who are executing and managing the project across China.



CFC Project Manager Eltha Brown and Ian Burrell of ILZSG listen to Mr. George Li Haonggao, Commercial Manager of the Shanghai Yongfeng Hot-Dip Galvanizing Co. Ltd.

The project has recorded a number of significant milestones in 2006, including:

- Compilation of detailed data for the first time on China's national HDG industry
- The selection of four pilot HDG demonstration plants that will act as centres of excellence for the Chinese and East Asian HDG industry
- The selection and training of two local environmental and energy auditors to assess HDG plants across the country
- The development of a computer training tool for operatives to use in HDG plants.

For more details of this project please email ian_burrell@ilzsg.org

NEXT STUDY GROUPS' MEETING DATES

The dates for the next International Study Groups' meetings in Lisbon, Portugal will be:

INSG: 10 - 11 May 2007

ILZSG: 14 May 2007

ICSG: 15 - 16 May 2007

AFRICAN COPPER BELT SEMINAR AT 28th ICSG MEETING IN LISBON

With Africa re-emerging as a major copper producer and its output having become increasingly important to global copper supply, the ICSG Secretariat provided a statistical overview of copper production in Africa during the Group's 28th Regular Meeting in September.

Several speakers were invited to offer their views on the current and future development of the copper industry in the African Copper Belt. Mr. Clive Newall, President, First Quantum Minerals Ltd, Gave a presentation on First Quantum's development strategy for becoming a major player in African copper production. Mr. Guoping Liu, Chief Geologist, CNMC, gave a presentation in which he outlined China's growth in demand and production, including CNMC's strategy for mine development in Zambia as a source of supply. In addition, Mr. Erasmus Shivolo, Mining Commissioner, Ministry of Mines and Energy, Namibia, gave a presentation on the Lubumbashi-Ndola-Walvis Bay Copper Forum's efforts to co-ordinate copper-related initiatives between Namibia, Zambia and the DRC.

4th INTERNATIONAL ZINC CONFERENCE, PLOVDIV, BULGARIA

The 4th International Zinc Conference, organised by KCM SA, was held in Plovdiv, Bulgaria from 11 to 12 September this year.

The conference was split into three Sessions each with a different emphasis. The first dealt with the 'State and Perspectives of the Zinc Business in Central and South-Eastern Europe' and included presentations on 'Challenges and Opportunities for the Zinc Industry', 'The Zinc Industry in Bulgaria' and 'The Indian Metals Industry', as well as a paper by Mr. Paul White, the ILZSG's Head of Forecasting Statistics, on the latest trends in the zinc market, with an emphasis on developments in China.

The second Session focused on environmental issues and zinc recycling and covered a range of topics in this area including presentations on 'New Business Model for the Big River Zinc Smelter', 'Zinc - Ecological Balance and Ecological Problems' and 'Combining Pyro and Hydrometallurgy to Process Zinc Bearing Secondary Materials'.

The final Session of the conference involved a detailed examination of 'Plant Operations and New Processes' by sixteen speakers from Australia, Bulgaria, Germany, Poland, Russia and Serbia.

For copies of the paper presented by Paul White please contact the ILZSG Secretariat at paul_white@ilzsg.org

ENVIRONMENTAL LEGISLATION STIMULATES NICKEL SUPPLY – THE CASE OF BATTERIES

Environmental legislation is primarily introduced to protect the environment. However, it can also stimulate recycling which, in the case of metals, often results in an increase of the supply of raw materials. During the last meetings of the INSG, presentations were made on legislations on batteries in Japan and the EU that, in addition to protecting the environment, will result in an increased recovery of nickel. At the same time, the value of the nickel included in products is already an incentive to recover as much nickel-containing product as possible.

In Japan, batteries recycling is regulated by the “Law for Promotion of Effective Utilization of Resources”, which was introduced in 2001. This Law combines explicitly protection of the environment and recovery of raw materials, as its objective is “to ensure material recycling in society, to reduce the consumption of natural resources and to reduce the environmental burden”. At the April 2006 meetings of the INSG, Mr. Hirotohi Kunitomo, Director General of the Metals Strategic Group of JOGMEC (Japan Oil, Gas and Metals National Corporation), introduced the Japanese legislation on the recycling of rechargeable batteries.

Central to the scheme for the recycling of compact rechargeable batteries is the Japan Battery Recycling Center, which was established in 2004. It has installed around 8000 collection sites for consumers. Moreover, the regulation has encouraged cooperative actions between all stakeholders: battery producers, retailers, consumers, and recyclers. In 2001, when the scheme was introduced, the recycling targets for nickel-containing rechargeable batteries was set at 60% for NiCd batteries and 55% for the NiMH batteries. The actual rates in 2004 were 74% and 77% respectively, resulting in a recovery of around 225 tons nickel, which was used as a raw material in stainless steel production.

At the October meeting of the INSG, Dr. Jean-Pol Wiaux, Manager of RECHARGE, an industry association established to promote the value of rechargeable batteries, introduced the New EU Batteries Directive. This Directive replaces the 1991 Directive, which covered only the marketing of batteries and accumulators containing dangerous substances such as cadmium. The new Directive addresses all types of batteries and applications (automotive, industrial and portable), and sets collection and recycling targets for the Member states for all types of batteries. Collection targets for 2012 are set at 25%, increasing to 45% by 2016. The industry is responsible for organising the take back system. Recycling targets are set at 50% by weight; for NiCd batteries the target is set at 75%. Batteries containing more than 0.002% cadmium are banned,

except for emergency and alarm systems, medical equipment and cordless power tools.

RECHARGE estimates the recovery of nickel from portable batteries in Europe in 2005 at around 1150t, including 380t in industrial NiCd batteries. Currently, the annual use of nickel in NiCd and NiMH batteries in Europe is estimated at 6600t. When applying the collection and recycling rates set for 2016, around 1900t of nickel would have to be recovered to comply with the new Directive. However, when this nickel is actually recovered depends on the lifetime of the batteries, which is, according to RECHARGE, on average more than 10 years.

For more details email dirk.kingma@insg.org

Forthcoming Events

CFC/ILZSG/IZA Galvanized Rebar Workshop:

More durable structures using hot dip galvanized reinforcing steel. Meeting to be held at Ain El Sukhna, Red Sea, Egypt on 5 December 2006. For more details on registration please email Doug Rorke at drouke@ilzro.org

American Zinc Association 2007 Conference

To be held at Rancho Mirage, California on 25 – 27 February 2007. For more details please visit www.zinc.org

3rd New Caledonia Nickel Conference, Noumea, New Caledonia, 25 - 30 March 2007. For more information please visit www.informa.com.au/ni07

6th International Copper Conference – Cu2007

to be held in Toronto, Canada, 25 - 30 August 2007. Contact Chris Twigge-Molecey ctwigge-molecey@hatch.ca for more details

ICSG Secretariat Vacancy

The ICSG is seeking to recruit a Head of Economics and Environment. Full details relating to the recruitment, including how to apply, can be found on the Group's web site www.icsg.org

The deadline for applications is 14 December 2006.

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Publications

The World Market for Rolled and Extruded Lead

Extensive 50 page report that examines the third most significant end use sector for lead. Attention is given to the main production processes, consuming sectors, and trade flows. The report concludes with an update on the voluntary risk assessment of lead underway in the European lead industry and on the outlook for rolled and extruded lead usage.

Published by ILZSG June 2006

The ICSG China Study

Traces the evolution of copper mine, smelter, refinery and semis production, copper usage and copper recycling (1994-2004). It looks at Chinese overseas investments in copper production and the main foreign semis manufacturing operations in China. It concludes with prospects for the Chinese copper industry in 5 years and 10 years and the potential of import substitution for fabricating, smelting/refining and mining.

Published by ICSG June 2006

ILZSG World Directory of Lead and Zinc Mines

The seventh edition of ILZSG'S Mine Directory brings together the latest available data on lead and zinc mines throughout the world. Includes details of mine location, mine type, start up year, mill capacity, lead and zinc capacity and contact details. Lists 276 mines in 43 countries.

Published by ILZSG July 2006

The Dynamics of Zinc Usage in Automobiles

Comprehensive 55 page report that considers materials selection in car manufacturing. The report discusses the major end use applications for zinc in cars and concludes with a section on future growth prospects for zinc in this sector.

Published by ILZSG in September 2006

World Directory of Nickel Production Facilities

Comprehensive directory lists nickel mines, smelters and refineries as well as new nickel industry developments (committed, likely and potential) together with recent closures in more than twenty countries.

Published by INSG October 2006

New Edition of Directory of Copper Mines and Plants

The third quarter 2006 edition highlights current capacity and provides a five-year outlook of forecasted capacity for over 700 existing and planned copper mines, smelters, and refineries on a country by country basis.

Published by ICSG November 2006

To place an order or for further information about the above and other publications published by the International Metals Study Groups please contact: sales@ilzsg.org for ILZSG reports, mail@icsg.org for ICSG reports, and insg@insg.org for INSG reports.