



Metals Despatch

Newsletter of the International Metals Study Groups

June 2011, Issue No. 11

LEAD AND ZINC FORECAST

The outlook for World supply and demand for lead and zinc was presented during the ILZSG Spring 2011 meeting held in Lisbon on 13 April 2011. Highlights include:

- **The global usage of refined lead metal** is expected to increase by 5.5% to 10.04 million tonnes in 2011. In China, an increase of 8.6% in usage is expected due to growing sales and exports of both original equipment and replacement lead-acid batteries together with higher demand from the e-bike sector. Demand in Europe will increase by 6.3% in 2011. In the United States a rise of 1.7% is forecast for 2011.
- **Global lead mine production** is forecast to increase by 7.8 % to 4.46 million tonnes in 2011 with higher output in Australia, China, India, Ireland, Mexico and the Russian Federation.
- **Global production of refined lead metal** in 2011 is expected to increase by 6.1% to 10.16 million tonnes. This will be influenced by the opening of new capacity in China as well as the commissioning of the Rajpura Dariba operation in India and a new plant in Monterrey, Mexico.
- It is currently expected that the global supply of refined lead metal will exceed demand by 123,000 tonnes in 2011.
- **Global zinc usage** is forecast to rise by 6.3% in 2011 to 13.4 million tonnes. Demand in Europe is expected to rise by 4.4% this year, while usage is anticipated to rise 6.6% in the United States. Usage in Japan is forecast to increase by 1.9% but this figure is likely to be revised when it becomes possible to take full account of the consequences for zinc demand of the earthquake. Chinese demand is expected to grow 9.4%, somewhat lower than 2010 as a consequence of government measures to limit the pace of economic expansion and control inflation.
- **Global zinc mine output** is forecast to increase strongly to 13.44 million tonnes in 2011. New mine capacity is scheduled to be brought on line in Australia, Canada, India, Saudi Arabia, Tajikistan, and Uzbekistan. In addition, higher production from existing mines is expected in China, Kazakhstan, Mexico, the Russian Federation and the United States.
- **Global refined zinc production** is forecast to rise 5.6% to 13.56 million tonnes in 2011, driven by increases in China, India and Peru. Production in China is forecast to increase 9.2%. New refineries at Rajpura Dariba in India and Cajamarquilla in Peru will contribute to the increase in global output.
- The latest **forecasts** indicate the global refined zinc market in surplus for the fifth successive year with the supply of refined zinc metal exceeding demand by 200,000 tonnes in 2011.

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

NEXT STUDY GROUPS' MEETING DATES

The dates for the next International Study Groups' meetings are:

ICSG: 26-27 September 2011, Lisbon, Portugal

INSG: 26-28 September 2011, Lisbon, Portugal

ILZSG: 29-30 September 2011, Lisbon, Portugal

Joint Study Groups'/CNIA Seminar 2:00 pm on 28 September 2011: "Reassessing the Outlook for Lead, Zinc, Copper and Nickel in China" Lisbon, Portugal

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COPPER FORECAST

During the 37th Regular Meeting of the International Copper Study Group Statistical Committee in Lisbon on 14-15 April 2011 member countries reviewed the current outlook for trends in World supply and demand for copper during 2011 and 2012 and issued the following forecast:

- Global **refined copper usage** is forecast to increase by 4% in 2011 to 20.1 million tonnes (Mt) as apparent usage expected to increase in all major markets. World copper usage is expected to increase further in 2012 to 20.9 Mt.
- Global **copper mine output** is expected to rise 4.6% in 2011 to 16.8 Mt as capacity ramps up and mine output is forecast to increase 6.3% in 2012 to 17.9 Mt.
- Global **refined copper metal production** in 2011 is predicted to increase by 3.5% to 19.7 Mt and expand 4.8% in 2012 to 20.6 Mt.
- ICSG anticipates that the **refined copper market balance** could show a deficit in 2011 of around 377,000 tonnes and that a deficit of around 279,000 tonnes in 2012.

For further details of the outcomes of the ICSG meetings or questions on the market outlook please e-mail ICSG Chief Statistician Ana Rebelo at rebelo@icsg.org

NICKEL FORECAST

The International Nickel Study Group (INSG) met on 11 and 12 April 2011 in Lisbon and reviewed the current outlook and trends in World nickel supply and demand. The following forecast was issued:

- Global **primary nickel usage** was 1.24 Mt in 2009 and increased to 1.47 Mt in 2010. For 2011 an increase to around 1.54 Mt is expected.
- World **primary refined nickel production** was 1.33 Mt in 2009, and increased to 1.44 Mt in 2010. In 2011 production could increase to 1.60 Mt. The 2011 figure does not include any adjustment factor for possible production disruptions.
- INSG members also discussed **market trends** and noted that nickel demand and usage accelerated in the first part of 2010, with stainless steel production increases in most regions of the world resulting in higher primary nickel prices and high demand for secondary nickel units in the first half. A slowdown was experienced in the latter part of the year in the stainless steel industry. 2011 started well with high production of stainless steel and good demand for primary nickel as well as recycled nickel products such as stainless steel scrap.

INSG recognizes that the natural disasters in Japan and to a lesser extent the political difficulties in the North Africa/Middle East resulted in some financial and economic uncertainty. The impacts of the above on both the supply and demand for nickel are not fully known. The Study Group cautions that future market developments could alter the forward-looking market balance.

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

JOINT STUDY GROUPS' SEMINAR

A Joint Seminar on "Materials Stewardship for Mining and Metals" was held on 13 April 2011 in Lisbon through the combined efforts of the International Lead and Zinc Study Group (ILZSG), the International Copper Study Group (ICSG) and the International Nickel Study Group (INSG).

The Seminar was opened by Keynote Presentation by Dr. John Atherton, Senior Program Director, International Council on Mining and Metals (ICMM). Dr. Atherton underlined the importance of the life-cycle approach to stewardship.

Presentations from governments were delivered by Mr. Ben Jarvis, Department of Resources, Energy and Tourism of Australia, Mr. Doug Panagapko, Natural Resources Canada, and Mr. Patrick O'Riordan, European Commission, DG Enterprise, for the EU.

Industry presentations were provided by Mr. Mick Roche, Stewardship Matters Pty Ltd. who spoke on "Non-ferrous Metals Stewardship" and by Dr. Ilse Schoeters, Manager, Global Product Safety and Stewardship, Copper Group, Rio Tinto, who spoke on "Rio Tinto Product Stewardship".

A Panel Discussion was held involving the above speakers as well as the following representatives of industry associations; Mr. John Schonenberger, Chief Executive, European Copper Institute, Dr. Frank van Assche, Director of European Affairs, International Zinc Association, Dr. David Wilson, Executive Director, International Lead Association, and Mr. Mark Mistry, EU Director Sustainability, Nickel Institute.

The seminar highlighted the fact that the topic of stewardship is vast and complex as it involves all aspects of production and usage as well as social, health and safety issues, and a wide range of stakeholders from producers to consumers. A number of programs and initiatives, both government and private, mentioned by the various speakers underscored the multifaceted aspects of stewardship. These included programs focused on specific commodities (such as Green Lead), some focused

on energy efficiency and others on emissions or other facets of stewardship.

For further details of work underway in the Study Groups please email paul_white@ilzsg.org (for lead and zinc), curtis_stewart@ilzsg.org (for nickel) and rebelo@icsg.org (for copper). The presentations given at the Seminar may be viewed by visiting: <http://www.ilzsg.org/presentations.asp>

INSG MEETING 11-12 APRIL 2011

Delegates from INSG member countries, industry and observing countries/organisations met in Lisbon 11-12 April to review statistical, economic and environmental issues related to nickel.

Delegates reviewed the INSG primary nickel market statistics in detail, and discussed the market forecast, which was prepared by the secretariat based on information provided by governments and industry. Details of the forecasts are provided on page 2.

The INSG Environmental and Economics Committee received presentations on topics related to environmental regulation and international policy initiatives that may affect nickel. Mr Pekka Perä, CEO of Talvivaara in Finland provided an overview of the company's operations which utilize bioleaching to extract metals from ore. Mr. Eduardo Carregueiro, Technical Manager at Bollinghaus Steel of Portugal described the operations of his company which exports a range of stainless steel products. Ms. Paola de Discordia, Director for Environment, Health and Safety at the Nickel Institute briefed members on EU regulatory issues affecting nickel. Mr. Gerd Oehm, Director Raw Materials and Procurement, ThyssenKrupp, spoke about their new stainless steel plant in Alabama, USA, which is one of the largest foreign investments in the U.S. and Mr. Paul Anciaux of the European Commission, Enterprise Directorate, described the new EU strategy on raw materials.

The Statistics Committee, reviewed the latest statistical data, and also received valuable input to its work through a series of presentations and discussions. Mr. Ric Deverell, Director of Commodities Research in London for Credit Suisse presented a paper on "Non Fundamental Factors in Nickel Pricing". Mr. Peter Kaumanns of ISSF provided a presentation on global stainless steel markets. Mr. Salvatore Pinizzotto, Managing Director of Xida Market Research, Italy, made a presentation on the Italian stainless steel market.

The INSG Industry Advisory Panel, comprised of representatives from the world's nickel producing, using and recycling industries, once again provided valuable input on the Study Group's work program priorities. The Panel heard from Dr. Sean Mulshaw, Senior Nickel Analyst at Brook Hunt Wood Mackenzie UK, who discussed the supply outlook for

nickel. Dr. Gerhard Pariser, Director of Market Research at Heinz H. Pariser Alloy Metals & Steel Market Research, Germany spoke first on global stainless steel scrap markets, and then provided a second presentation on nickel first use and end use markets.

Copies of the presentations are available on the INSG website www.insg.org

ILZSG SPRING MEETING, LISBON 2011

The International Lead and Zinc Study Group held its Spring meeting in Lisbon on 13 April 2011. The Statistical and Forecasting Committee presented a review of the current outlook for World supply and demand for 2011 (See details on page 1). Meetings of the Standing Committee, Economic and Environment Committee and the ILZSG Industry Advisory Panel were held as well.

The Industry Advisory Panel meeting on 13 April provided an opportunity for an exchange of information between members and industry on the latest developments in the lead and zinc market. Presentations were made by Mr Neil Buxton, Managing Director, Base Metals, GFMS, on 'External Influences on the Global Lead and Zinc Markets', Mr. Bian Gang, Director General, CNIA, on "Best Practice for Used Lead-Acid Battery Collection and Processing in China" and by Mr. Graham White, Director of Marketing, HudBay Minerals, on "A Strategic Overview of HudBay Minerals". Copies of presentations are available on the ILZSG website.

The Study Group's Economic and Environment Committee met on 13 April. Dr. Frank van Assche, Director of European Affairs for the International Zinc Association, gave an overview of IZA programs related to global zinc deficiency. Dr. David Wilson, Executive Director of the International Lead Association spoke on current developments in regulatory arrangements affecting the industry and Mr. Maio Gomes, the Technical Director at Libbey Glass in Portugal gave a presentation on the past and future applications of lead and zinc in glass. Copies of the presentations are available on the ILZSG website www.ilzsg.org.



Copper Wire

ICSG WELCOMES AUSTRALIA TO THE GROUP!



Australia has become the newest member of the International Copper Study Group. Australian companies are world leaders in mining, refining and fabrication of copper as well as being respected for their environmental management and planning. ICSG welcomes Australia!

ICSG CONVENES 37th REGULAR MEETING

Over 50 representatives from ICSG member governments and companies, observer governments and organizations attended the International Copper Study Group's 37th Regular Meeting at ICSG Headquarters in Lisbon on 14-15 April 2011.

Meetings were held of the Environmental and Economic Committee (EEC), Statistical Committee, Industry Advisory Panel, Finance Committee and Standing Committee, followed by a Plenary Session. At the EEC meeting the Committee was provided with a scene-setting presentation on "Global Copper Market Trends 2011-2012" by Mr. Robin Bhar, of Calyon. Following presentations by Mr. Michael Jansen, of JP Morgan and Mr. Andrew Home, of Thomson Reuters, a round table discussion took place on 'exchange traded funds' (ETFs), the physical market and price volatility. The interlinked themes of recycling, copper scrap markets and global copper flows were also examined, facilitated by presentations from Mr. Geraud Servin of the European Copper Institute and the ICSG secretariat.

At the Statistical Committee meeting, ICSG Chief Statistician Ms Ana Rebelo delivered presentations on the current state of the global copper market, developments in world copper mine and refinery capacity till 2014, and the ICSG copper production and usage forecast for 2011/2012. Under the theme of "Ensuring Sustained Growth in Copper Supply" Mr. Glen Jones of Intierra provided a global view of copper mine projects, Mr. Li Yusheng of Antaiko spoke on copper mine resources and developments in China and Mr. Robert Stein, Bureau of International Recycling, talked on copper recycling. Global copper reserves/resources were examined by the Committee based on input from Mr. Daniel Edelstein from the United States Geological Survey. Mr. Ben Jarvis, the representative of Australia, outlined developments and prospects in relation to

the large Australian copper industry. Presentations may be viewed at ICSG's web site www.icsg.org

ICSG AT MB COPPER CONFERENCE 2011

ICSG Head of Economics and Environment, Carlos Risopatron, delivered a presentation entitled "Global Trends for the Use of Copper" at the Metal Bulletin 2011 Copper Conference in Istanbul, Turkey in March 2011. For more information, please contact the ICSG Secretariat at risopatron@icsg.org

ICSG PRESENTS AT BIR SINGAPORE RECYCLING MEETING

At the Bureau of International Recycling Symposium on Copper, held in Singapore on 24 May, ICSG Head of Economics and Environment, Carlos Risopatron, delivered a presentation entitled "Copper and Copper Alloy Scrap Markets: Global Trends and Future Opportunities". The BIR recycling conference is one of the most important such meetings globally.

INSG PARTICIPATES IN NICKEL LIFE CYCLE TOUR

The INSG Head of Economics and Environment, Curtis Stewart, took part in the Nickel Life Cycle Tour sponsored by the Nickel Institute 16-17 June 2011 in Finland. The tour highlighted the production and processing of nickel from the mine, through smelting and refining and on to the retail level and end users. This initiative of the Nickel Institute aims to improve communications and understanding between governments and industry.

ICSG SECRETARY GENERAL VISITS ZAMBIA

ICSG Secretary-General Don Smale visited Zambia in June 2011 to make a presentation on "Global Copper Developments" at the 1st Zambian Mining and Energy Conference organized by the Ministry of Mines and mineral Development and the Chamber of Mines of Zambia. During the visit he met with the Zambian Minister for Mines and Mineral Development, the Hon. Maxwell Mwale and with the Departmental Secretary, Mr. Godwin Beene, to discuss Zambia's potential membership of the International Copper Study Group.

MINING JOURNAL PUBLISHES INSG ARTICLE

INSG staff collaborated in writing an article on the world nickel market in 2010 and the outlook for 2011. The article was published in the 27 May 2011 edition of Mining Journal under the title 'Bouncing Back – The Nickel Market Rebounded in 2010'. The secretariat has distributed copies to all INSG member country delegations.

ICSG WELCOMES NEW STAFF MEMBER

Ms Susanna Keung has joined the International Copper Study Group as Statistical Analyst/Economist. She was previously copper consultant at CRU in London.

ILZSG PARTICIPATION IN INDIAN INSTITUTE OF METALS CONFERENCE AND VISIT TO CHANDERIYA

The ILZSG Head of Forecasting and Statistics, Paul White presented a paper entitled "An Overview and Outlook for the Global Lead, Zinc, Nickel and Copper Markets" at the Indian Institute of Metals' 8th International Conference which was held in New Delhi from 12-13 February this year. The paper was published in the April edition of the Indian Minerals and Metals Review (MMR) magazine. Copies are also available from the secretariat at paul.white@ilzsg.org.

During his trip to India the Head of Forecasting and Statistics also visited Hindustan Zinc's Chanderiya complex in Rajasthan which, after recent expansions, is one the largest zinc plants in the world with an annual capacity of 525kt. Whilst he was at Chanderiya Mr. White gave a presentation on the current situation in the global lead and zinc markets. Copies of this paper are also available from the secretariat.

Forthcoming Events

MEETINGS, CONFERENCES and SEMINARS

- **The 14th Asian Battery Conference** will be held in Hyderabad, India 13-16 September 2011. More information can be found at [14ABC](#)
- **The 17th International Lead Conference (Pb2011)** will take place in the Lisbon Marriott Hotel, Lisbon on 21-23 September 2011. Organised by the International Lead Association. More information can be found at www.ila-lead.org
- **3rd International Zinc Symposium, October 10-14, 2011, Novotel Hyderabad Airport, Hyderabad, India.** Co-organized by the International Fertilizer Industry Association (IFA), the International Zinc Association (IZA), the Fertiliser Association

of India (FAI) and HarvestPlus. The theme of the Symposium is "Improving Crop Production and Human Health". Topics include: human nutrition, soil and crop management, zinc fertilizers and crop nutrition, plant physiology, genetics and molecular biology, as well as environmental issues. More information can be found at <http://www.zinc.org/>

- **The 29th International Conference on Mining 2011 - XXIX Convención Internacional de Minería 2011**, will take place from October 26-29, 2011 in Acapulco, Mexico. More information is available at the website www.expominmexico.com.mx
- **The 2012 International Zinc Conference & International Zinc Oxide Industry Conference** - February 19-22, 2012 - Westin Mission Hills Resort, Palm Springs, CA, USA. Organized by the International Zinc Association. For more information visit <http://www.zinc.org/>



Nickel Briquette. Component Ni: 99.89%



PUBLICATIONS

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*******AVAILABLE NOW*******

NEW

INSG Environment, Health and Safety (EHS) Regulations Relating to Nickel 2011

An update of the annual compilation of environmental, health and safety regulations affecting nickel. The listing of regulations is provided by country, state or province as well as separately for international organizations. The report is presented in a spreadsheet format and contains web links to regulations in various jurisdictions. 42 pages. *Published June 2011.*

NEW

World Directory 2011: Primary and Secondary Lead Plants

An overview and full detailed listing of over 270 primary and secondary lead smelters and refineries in 66 countries showing addresses, telephone and fax nos., e-mail, web addresses, types of plant operated and current capacities. Also includes, summary tables and graphs. 105 pages. *Published May 2011.*

NEW

Environmental and Health Controls on Zinc: 2011

A review of current and proposed regulations controlling zinc in works, zinc in the atmosphere, zinc in water and recommended daily dietary allowance for humans and animals. *Published May 2011.*

NEW

Environment and Health Controls on Lead: 2011

An updated and expanded review of current and proposed regulations controlling lead in works, lead in the atmosphere and lead in water in 37 countries. *Published May 2011.*

NEW

ICSG Directory of Copper Mines and Plants

The Directory of Copper Mines and Plants highlights current capacity and provides a five year outlook of forecast capacity for over 1,000 existing and planned copper mines, smelters and refineries on a country by country basis, including separate tables for SX-EW plants. Salient details for each operation are included and the Directory separates operations between Operating & Developing and Exploration & Feasibility stages. *Published March 2011*

NEW

ILZSG Lead & Zinc New Mine & Smelter Projects 2011

This 73 page report covers lead and zinc mines and smelters opened or closed during 2010, firm projects currently committed and projects under consideration. Developments in 48 countries on all continents are covered with a total of over 200 separate entries. In addition, where available, estimates of ore reserves and the percentages of the metals they contain are given. *Published January 2011*

The World Copper Factbook 2010

A comprehensive overview of copper, with statistics, graphs, flowcharts and more providing details on production, usage, recycling, definitions and history. 54 pages. *Published October 2010.*

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INSG 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 October 2010.*

Directory of Copper & Copper Alloy Fabricators (First Use) 2010 Edition

This directory provides a systematic global overview of companies and plants involved in the first use of copper. First users are mainly semis fabricators that process refinery shapes into semi-finished copper and copper alloy products. The Directory covers wire rod plants, ingot makers (for castings), master alloy plants, brass mills, and electrodeposited copper foil mills. *Published September 2010.*

Final Report of the ICSG Copper Scrap Project

Synthesizing the findings of an ICSG research project on the copper and copper alloy scrap markets that was approved by ICSG members and initiated in October 2007, this report presents a comprehensive picture of the global copper scrap market and its determinants. *Published August 2010.*

ICSG 2010 Statistical Yearbook

The ICSG Copper Bulletin yearbook includes annual statistics on copper and copper products, production, usage and trade by country, as well as stocks and exchange prices, providing a global view of supply and demand for the past 10 years. The Yearbook serves as a useful tool for consultations and analysis on the evolution of world copper production, usage, stocks and prices. *Published July 2010.*

China Lead Acid Battery Market

This detailed study, prepared for the ILZSG by the Beijing General Research Institute of Mining and Metallurgy (BGRIMM), provides an overview of current production and usage of lead-acid batteries in China together with a summary of likely rates of growth over the period 2009 to 2014. Much of the information contained in the report has been sourced directly from battery manufacturers, e-bikes producers, experts in renewable energy etc. *60 pages. Published June 2010.*

China Zinc Recycling Industry

Prepared for ILZSG by the Beijing General Research Institute of Mining and Metallurgy (BGRIMM), this report provides a comprehensive assessment of the volume of zinc recovered from scrap in China. It also provides information regarding the main sources of secondary zinc material and likely future trends. Much of the data contained in the report has been sourced directly from zinc producers, consumers, traders and scrap dealers. *44 pages. Published June 2010.*

Nickel Pig Iron Study 2010

The report analyzes the driving forces behind the increasing use of nickel pig iron in China. Identifies current and new projects totalling over 150 000t per annum. Highlights possible substitution among nickel pig iron, ferro-nickel, stainless steel scrap and nickel metal. It also reviews the most important cost factors. *70 pages. Published May 2010.*

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Nickel Heap Leaching Study 2010

A comprehensive analysis of heap leaching in nickel production prepared for INSG by consultants, this report provides up to date information on all aspects of heap leaching. It examines the various hydrometallurgical processes applied to nickel leaching. It also covers the economic and environmental impact of the use of heap leaching, including on CO2 emissions. 72 pages. *Published April 2010.*

ILZSG World Directory: Continuous Galvanizing Lines 2010

A full listing of continuous galvanizing lines with information from 62 countries. The Directory includes data on plant locations, annual capacities, annual zinc consumption and contact information. 95 pages. *Published in January 2010.*

Framework for Analyzing the Impacts of Investment Legislation and Tax Regimes on Copper Supply Coming On Stream

As part of ICSG's efforts to better understand the opportunities and challenges facing the copper industry, mineral economist Mr James Otto was commissioned to produce this report that examines how national regulatory and fiscal systems impact copper supply coming on stream. *Published October 2009.*

Copper Scrap Market in Japan, China's Scrap Usage Survey and Domestic Copper Scrap Generation in China, 2010-2015

Adding to ICSG's expanding body of research on scrap, ICSG commissioned three reports about scrap that provide new information on two critical copper markets: Japan and China. The Japanese report, prepared by MERI/J, provides a comprehensive overview of the Japanese refined copper and copper scrap markets and also covers Japanese copper scrap trade, material flows, how scrap is categorized and relevant regulations. The Chinese reports, prepared by BGRIMM, give better insight into scrap usage in China at the smelters/refineries and fabricators and forecast domestic scrap generation in China. *Published October 2009.*

INSG Market for Nickel: Fundamentals Driving Change 2009

Comprehensive analysis of the drivers for change in the world nickel market. Analyses the structure of mine and refined world nickel production and identifies current and future trends. Assesses nickel usage patterns in the main market sectors. Traces changes in the structure of industry ownership. The 2009 edition updates the original report of 2008. *Published September 2009.*

INSG Nickel in Batteries 2009

A comprehensive report on the use of nickel in batteries drawing on data from a variety of sources, both government and private. Provides a history of nickel in batteries and describes the principal types of batteries which use nickel. A comparison of the various nickel containing batteries in terms of cost and energy density is provided, as is information on the environmental regulations impacting nickel batteries. Includes a list of major producers of nickel containing batteries with web addresses. 25 Pages. *Published May 2009.*



MORE PUBLICATIONS

*****COMING SOON*****

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ICSG 2011 Statistical Yearbook

The ICSG Copper Bulletin yearbook includes annual statistics on copper and copper products, their production, usage and trade by country, as well as stocks and exchange prices, providing a global view of supply and demand for the past 10 years. The Yearbook serves as a useful tool for consultations and analysis on the longer term evolution of world copper production, usage, stocks and prices. *To be published July 2011.*

ILZSG Principal Uses of Lead and Zinc 2011

Based on data from ILZSG's extensive network of contacts, this publication provides a summary of aggregate demand by country and by market sector, analysis of first use, information on zinc alloys by country, zinc in galvanizing, alloys, brass and bronze, dust, chemicals and lead use in batteries, cables, rolled and extruded products, alloys. *To be published September 2011.*

ICSG Directory of Copper Mines and Plants

The Directory of Copper Mines and Plants highlights current capacity and provides a five year outlook of forecast capacity for over 1,000 existing and planned copper mines, plants and refineries on a country by country basis, including separate tables for SX-EW plants. Salient details for each operation are included and the Directory separates operations between Operating & Developing and Exploration & Feasibility stages. *Last published in March 2011, the next update is scheduled for publication in October 2011.*

ILZSG Investigation of the Indian Lead Market

Latest data suggest that both the production and usage of lead in India are rising at a rapid rate. In addition, survey information indicates that the number of companies recycling lead in India has increased significantly in recent years. This report, which will be undertaken by the Indian Lead Zinc Development Association (ILZDA) on behalf of the ILZSG, will include a comprehensive assessment of current producers, levels of production, the types and qualities of alloys being produced and trends in the main end use markets. *To be published October 2011*

INSG 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. *To be published October 2011.*

The World Copper Factbook 2011

A comprehensive overview of copper, with statistics, graphs, flowcharts and other information providing details on production, usage, recycling, definitions and history. *To be published November 2011.*

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