



ICSG PRESS RELEASE

New Edition of 'Directory of Copper Mines and Plants'

The International Copper Study Group released its October 2005 Directory of Copper Mines and Plants. The current edition reflects changes to data revealed between July 2005 and October 2005, and covers a period of 5 years from 2004 to 2009.

Based on new information and announced developments/expansions, annual mine capacity in 2009 is projected to grow to 19.3 million tonnes (Mt), an increase of about 3.5 Mt [2.1 Mt of concentrates and 1.4 Mt of solvent extraction–electrowinning (Sx-Ew)] from that in 2004. The total projected compound annual capacity growth rate over the 5-year period is 4.1%, with annual growth rates for concentrate and Sx-Ew of 3.1% and 8%, respectively. Included in the projected mine growth is 1.5 Mt of capacity that is still in the exploration and/or feasibility stage and has not been finally committed to development.

Smelter capacity in 2009 is projected to reach 17.4 Mt, an increase of 1.9 Mt from that in 2004, with capacity additions mainly occurring in the first 3 years of the period covered. The smelter growth rate for the first 3 years of the period (3.5%) will be in line with the growth rate for concentrate capacity (3.4%). The projected annual compound growth rate over the 5-year period is 2.4%, lower than the expected increase in concentrate capacity (3.1%). For the out years, assuming that smelter capacity utilization rates rise from the current low level, smelter capacity should be sufficient to treat any additional concentrate production.

The ICSG expects world refinery capacities to increase by 3.1 Mt between 2004 and 2009. Of this, about 750,000 t is still in the planning stage (all electrowinning) and is not yet committed to construction. About 1.7 Mt of the expansion is forecast to come from electrolytic refineries and 1.4 Mt from electrowinning. As for smelters, capacity additions at electrolytic refineries mainly occur between 2005 and 2007 and the growth for this period is 3.2%. The annual compound growth rate for the 5-year period for electrolytic refineries is projected to be 2.1%, in line with the projected growth in smelter capacity, and the growth rate for electrowinning capacity (at the refinery level) is 7.9%.

The projected expansions exclude additional production that could come from existing capacity at mines and plants that are currently on care & maintenance or are temporarily cutback (swing capacity). According to ICSG research, this "swing capacity" is currently minimal for mines. With the announced closure of two US plants that have been on care and maintenance since 2001, total idled capacity for smelters declined to 212,000t from 400,000t estimated in the July Directory, and idled refinery capacity fell to 370,000t from 540,000t.

Projected World Capacities until 2009

<i>000's metric tonnes Cu</i>	2004	2005	2006	2007	2008	2009
SX-EW	2,978	3,102	3,319	3,559	4,115	4,361
Concentrates	12,843	13,584	13,720	14,175	14,739	14,980
Mines Total	15,821	16,686	17,038	17,734	18,854	19,341
Smelters	15,419	16,147	16,867	17,103	17,211	17,366
Electrolytic Refineries	15,645	16,550	16,912	17,196	17,236	17,326
Refineries Total	19,377	20,398	20,976	21,510	22,106	22,442
	2004/05	2005/06	2006/07	2007/08	2008/09	Sum 2004-2009
Year on Year Changes						
SX-EW	124	217	241	556	246	1,383
Concentrates	741	136	456	564	241	2,137
Mines Total	865	352	696	1,120	487	3,520
Smelters	728	720	236	108	155	1,947
Electrolytic Refineries	905	362	284	40	90	1,681
Refineries Total	1,021	578	534	596	336	3,065

Economic conditions, as well as technological and business factors, will result in production levels that vary from the indicated capacity. Similarly, production levels may be affected by newly announced capacity additions, expansions, and closures or by the delay, advancement, or cancellation of projects.

Every quarter, the International Copper Study Group releases its **Directory of Mines and Plants**. The Directory provides basic data for all copper mining, smelting and refining operations on a world-wide basis and projects the development of future capacities for these operations. Each issue is complemented by a list of the web addresses of companies, enabling a quick and easy access to more company details.

The Directory highlights capacities for over 700 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 Planned (Exploration & Feasibility) stages.

Each issue charts long-term development of capacities (20 years) for World totals, broken down by production process, and summary data for each country for a 10-year period. The detailed tables of operations show the capacities for a base year and the projection of capacities for five years. These projections can serve as a basis for forecasts of the supply side development of copper.

The database is continuously updated to reflect recent announcements and operational changes. The updated issues are published on a quarterly basis. Contact ICSG for purchasing details (mail@icsg.org).