

Copper

Copper – 2011 Annual Review and Outlook

- Highlights
- Canadian Production Summary
- Canadian Developments
- World Production
- Market Review and Outlook

Copper - Other Information

- General Information
- Occurrences and Mineralogy
- Uses

Maps/Graphs

- Figure 1. Copper, Daily LME Cash Settlement Prices, January 2011 to June 2012
- Figure 2. Copper Prices and Exchange Stocks, 2005-11

Statistical Tables

- Tariffs
- Table 1. Canada, Copper Mine Production, Shipments, and Trade, 2009-11
- Table 2. Canada, Copper Production, Trade, and Use, Historical, 1988-2011
- Table 3. Recent World Copper Data, 2009-11
- Table 4. London Metal Exchange Copper Prices, 2008-11
- Table 5. Recent Canadian Copper Data, 2009-11
- Table 6. Canadian Mines Producing Copper in Concentrate, 2009-11
- Table 7. World Mined Copper Production, 2009-11
- Table 8. World Refined Copper Production. 2009-11
- Table 9. World Copper Usage by Region/Country, 2009-11
- Table 10. Actual and Forecast World Copper Supply and Demand, 2011-13

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Copper – 2011 Annual Review and Outlook

HIGHLIGHTS

- A major, new open-pit copper mine, Copper Mountain, opened in British Columbia.
- Operations permanently ceased at the Kemess South mine in British Columbia.
- Continuing sluggish supply supported prices despite a slowing in copper demand growth.

Copper is the third-ranking metal produced and used in the world behind aluminum and steel. Global refined copper production in 2011 was reported at 19.7 million tonnes (Mt). Of this amount, 17.7%, or 3.5 Mt, was produced from recycled sources (Table 3).

Copper prices on the London Metal Exchange (LME) remained strong in the first half of 2011, trading in a range between US\$3.87 per pound (/lb) and US\$4.60/lb. Prices declined steadily from August to October, reaching a low for the year of US\$3.08/lb on October 4, 2011. They strengthened slightly over the fourth quarter to finish the year at US\$3.43/lb. The average LME copper price in 2011 was US\$4.00/lb, an increase of 17%, or US\$0.58/lb, over the 2010 average of US\$3.42/lb.¹

CANADIAN PRODUCTION SUMMARY

Copper production data for Canadian mines that produced copper in 2009, 2010, and 2011 are detailed in Table 6.

Total Canadian mined copper output in 2011, based on individual company reports, was 575 000 tonnes (t), a 15% jump from 2010 output of 497 000 t. Increased output at Xstrata's Sudbury operations, a return to normal operating rates at Vale's strike-ravaged Voisey's Bay and Sudbury operations, and new output from the recently opened Copper Mountain mine more than offset declines at Kidd Creek, Mount Polley, Gibraltar, and the now-closed Kemess mine. Details on significant developments at individual operations are discussed below in the Canadian Developments section.

Based on data reported to Natural Resources Canada via monthly surveys, refined copper production declined by 14% to 273 800 t in 2011, compared with 319 200 t in 2010. The lower year-over-year output

was attributable to the permanent closure of the Kidd Creek refinery in May 2010 and to slightly lower output at the Canadian Copper Refinery (CCR) owned by Xstrata.

CANADIAN DEVELOPMENTS

Mined copper output from Vale's Canadian operations rebounded following prolonged strikes that began in 2010 at both the Voisey's Bay mine and the Sudbury nickel operations where copper is produced alongside nickel. A 12-month strike at the Sudbury operations, which ended on July 13, 2011, resulted in reported mined copper output for 2011 of 111 000 t from Vale's own mines (Sudbury and Thompson) plus an additional 33 000 t from ore purchased from third parties. Smelter production in the second quarter was negatively affected by an outage at one of the two furnaces at Copper Cliff.

A 17-month strike at Vale's Voisey's Bay mine was settled at the end of January 2011. Vale reported 51 000 t of mined copper output from Voisey's Bay in 2011, up from 33 000 t in 2010.

Xstrata plc produces copper in concentrates from the Kidd Creek mine near Timmins, Ontario; the Strathcona mill at its Sudbury copper-nickel operations; as a by-product from the Perseverance zinc mine and the Raglan nickel mine, both in northern Quebec; and the Brunswick zinc-lead mine in Bathurst, New Brunswick. Copper output at the Sudbury operations rose by 38% in 2011 to 49 887 t due to significant copper contained in Nickel Rim South ore and a copper zone at the Fraser mine. Copper output at the Kidd Creek mine fell 24% to 42 322 t of contained copper due to lower grades and restricted access to portions of the mine following two seismic events in the second half of 2011.

Anode production at Xstrata's Horne smelter in Rouyn-Noranda, Quebec, was 187 410 t, a 45% decline from 2010 output. In its year-end performance report, Xstrata attributed the reduction to operational issues related to a project to increase the volume of recyclable material processed at the smelter. The volume of recyclable material treated in 2011 rose by 5% to 113 000 t.

In June, Hudbay Minerals Inc. produced 54 000 t of copper in 2011 from the 777 and Trout Lake mines, both located in or near Flin Flon, Manitoba. Trout Lake is expected to reach the end of its mine life in June 2012. The company also continued work on a \$20 million extension of the 777 mine and the fast-track development of the Lalor Lake deposit. HudBay also announced it would proceed with a \$71 million project to develop the Reed Lake deposit near Flin Flon. First production is expected by late 2013. The expected average annual copper output from this high-grade, near-surface deposit is 17 000 t of contained copper over a five-year mine life. Output in 2012 from HudBay's Flin Flon area mines is expected to be in the 35 000- to 45 000-t range.

The Kemess South mine ceased operations in March 2011 due to the depletion of economic reserves. Northgate Exploration Limited, the owner and operator of Kemess, was acquired by AuRico Gold Inc. in October 2011. AuRico was continuing to explore the potential of exploiting a high-grade zone within the Kemess North deposit located approximately 5 kilometres (km) north of the Kemess South mine. In 2011, AuRico conducted additional geotechnical drilling to support a planned 2012 feasibility study on the deposit, which has an indicated resource of 136 Mt of ore containing 2.6 million ounces (oz) of gold and 860 million lb of copper. A preliminary economic assessment conducted by Northgate indicated the potential for a low-cost, bulk underground mine that could yield annual production of 41 million lb of copper and 95 000 oz of gold over a 12-year mine life. The envisaged operation would use the existing infrastructure and mill facilities at the Kemess South mine, including a permitted area for tailings storage in the Kemess South open pit.

The Copper Mountain mine began operations in June and started producing concentrate in September. The mine, owned by Vancouver-based Copper Mountain Mining Corporation (75%) and Mitsubishi Materials Corporation (25%), is located near Princeton, British Columbia, and consists of a 35 000 tonne-per-day (t/d) concentrator and a super pit that incorporates three former pits mined prior to 1996. After a series of operational problems that resulted in lower-than-planned output, the company advised in an operations update issued in September 2012 that the mill was expected to produce at full capacity over the final four months of 2012. Copper Mountain's targeted annual copper production is approximately 45 000 t over a 17-year life.

Thompson Creek Metals Company Inc. continued construction and development of the Mt. Milligan copper-gold project northwest of Prince George, British Columbia. The project comprises a conventional truck-shovel open-pit mine with a 66 000-t/d copper flotation processing plant. Its estimated annual production is 81 million lb of copper and 194 000 oz of gold over a 22-year mine life. The first commercial production is anticipated in late 2013.

In February 2011, Taseko Mines Limited announced that its Board had approved a Phase 3 expansion at the Gibraltar copper-molybdenum mine in British Columbia. The expansion includes the construction of a 30 000-t/d concentrator that will increase total throughput capacity to 85 000 t/d. The mine's average annual copper production is expected to increase by 50% to 180 million lb by 2014. The expansion also includes a molybdenum recovery plant that will substantially increase overall molybdenum recoveries on the entire 85 000-t/d throughput to the 50-60% level from the current, relatively poor 20-30% level.

In addition to the aforementioned expansion and greenfield project developments, New Gold Inc.'s New Afton mine near Kamloops, British Columbia, reached commercial production in the third quarter of 2012 and is expected to produce approximately 15 000 t of copper in 2012 and 39 000 t per year by 2015. The estimated additional copper output from these projects is projected to lift Canada's annual mined copper production by 30% by 2015 from its 2011 production level.

Several other advanced-stage projects could also come into production over the next five to seven years. These include Kutcho, northeast of Smithers B.C.; Morrison, in central B.C.; Red Chris, near Dease Lake, B.C.; and Victoria, near Vale's Totten mine in Sudbury, Ontario.

WORLD PRODUCTION

Based on data available from the International Copper Study Group (ICSG), world mined copper production in 2011 was 16.04 Mt, which is unchanged from total output in 2010. In terms of mine production, Canada ranked eighth behind Chile, China, Peru, the United States, Australia, Russia, and Zambia (Table 7).

World refined copper production was 19.7 Mt, up 3.4% from 19.0 Mt (Table 8). In 2011, Canada ranked twentieth in terms of world refined copper production. The top five copper metal-producing countries in 2011 were China, Chile, Japan, the United States, and Russia.

MARKET REVIEW AND OUTLOOK

Global Supply/Demand and Price Outlook

A country and regional breakdown of world copper usage, or demand, over the period 2010-12 indicates that demand growth in Asian countries excluding China, and in the Americas, declined in 2011, but usage growth in Europe was a healthy 5.6%. A 5.9% decline in demand growth in Japan reflects the severe

disruption in industrial output due to the March 2011 earthquake and tsunami. China's year-on-year growth was 7.1%, almost double the previous years' rate. Growth in overall global copper usage was 2.6%, compared to 2010 year-on-year growth of 6.8% (Table 9).

On the supply side, zero growth was recorded in mined copper output, continuing a trend in slow growth that began in 2005 and that is largely responsible for the upward trend in prices. Once again, the anticipated growth in mine supply failed to materialize due to a variety of factors including slow ramp-ups at new mines, labour unrest, weather, technical issues, and declining average grades at several of the largest copper mines (Table 3).

A supply/demand balance forecast for 2011 and 2012 released by the ICSG in April 2012 indicated a deficit of 235 000 t of copper in 2011 and a forecast deficit of 237 000 t in 2012 (Table 10). In 2013, a surplus of 361 000 t is forecast on the expectation of slower demand growth in China and the European Union, and improved refined production growth in 2013 based in part on the expectation of an improvement in copper concentrate supply. Other analysts are predicting surpluses in the refined copper market from late 2012 through 2014. Beyond 2014, there is a growing view that there are simply not enough new mines or expansion projects in the pipeline to satisfy expected demand and that the market could revert back to a deficit.

Low stocks, tight supplies, steady demand in China, and improved demand elsewhere pushed the average LME price for copper to US\$4.00/lb in 2011, a 17% increase over the 2010 average price of US\$2.34/lb. Steady demand growth and the low level of global stocks should continue to support prices throughout 2011 and 2012. Some analysts are forecasting an average copper price of around US\$3.60/lb for 2012. Beyond 2012, analysts' predictions for the yearly average copper price are falling in the range of US\$3.50-\$3.75/lb for 2013 and US\$3.20-\$3.50/lb for 2014.

¹London Metal Exchange Official Daily Settlement Price, US¢/lb.

Notes: (1) For definitions and valuation of mineral production, shipments, and trade, please refer to the document entitled "Definitions and Valuation: Mineral Production, Shipments, and Trade." (2) Information in this review was current as of September 20, 2012. Some information on developments related to copper supply/demand and price trends that occurred in 2012 has been included. (3) This and other reviews, including previous editions, are available on the Internet at www.nrcan.gc.ca/minerals-metals/business-market/canadian-minerals-yearbook/4070.

Copper - Other Information

GENERAL INFORMATION

Canada is an important producer of copper, which is one of the most useful and important metals known.

Copper's properties, particularly its high electrical and thermal conductivity, good tensile strength, elevated melting point, non-magnetic properties, and resistance to corrosion, make it and its alloys very attractive for electrical transmission, water tubing, castings, and heat exchangers.

OCCURRENCES AND MINERALOGY

In nature, copper is usually associated with other metals such as zinc, nickel, molybdenum, and gold. Copper combines with sulphur and iron to form sulphide minerals, which may occur with these metals in either massive sulphide deposits or as disseminated deposits known as porphyries.

The most common copper deposits in Canada are accumulations of massive sulphides from volcanic or magmatic activity, and porphyries, which have a magmatic origin. Economic massive sulphide deposits normally contain concentrations (or grades) of copper and other metals that are higher than those found in porphyry deposits, which usually are much larger in volume.

Occurrences of copper minerals in Canada are very widespread. However, concentrations of copper-bearing ore that permit profitable exploitation are confined to relatively few locations. Within Canada, four provinces (British Columbia, Ontario, Quebec, and Manitoba) account for the majority of copper production. British Columbia is the largest copper-producing province. Ontario, the second largest copper-producing province, owes much of its importance to the Sudbury region where the metal is recovered in conjunction with nickel mining operations. Another important copper-producing area in Ontario is Timmins. Large-scale copper mining began in Quebec late in 1927 with the opening of the Horne mine at Noranda, and the smelter built there now recycles copper and also produces primary copper. Copper production in Manitoba, which is Canada's fourth largest copper-producing province, is centred around Flin Flon. Elsewhere in Canada, copper is recovered in minor amounts in the Atlantic provinces, the Yukon, and the Northwest Territories. Voisey's Bay in Newfoundland and Labrador produces copper as a by-product of nickel and cobalt mining.

Ore bodies at or near the surface are usually mined by open-pit methods. When an ore body occurs at depth, it must be mined by underground methods.

USES

Some of the most common and widespread applications for copper are in electrical transmissions, water tubing, castings, and heat exchangers. Worldwide, over two thirds of the copper produced is used in wire and cable. In Canada, more than half of the copper that is refined annually is used for electrical applications, mostly wire.

Due to its high electrical conductivity, a primary application of copper is in wire and cable used to carry power and signals. The high conductivity means good efficiency, and good corrosion resistance means

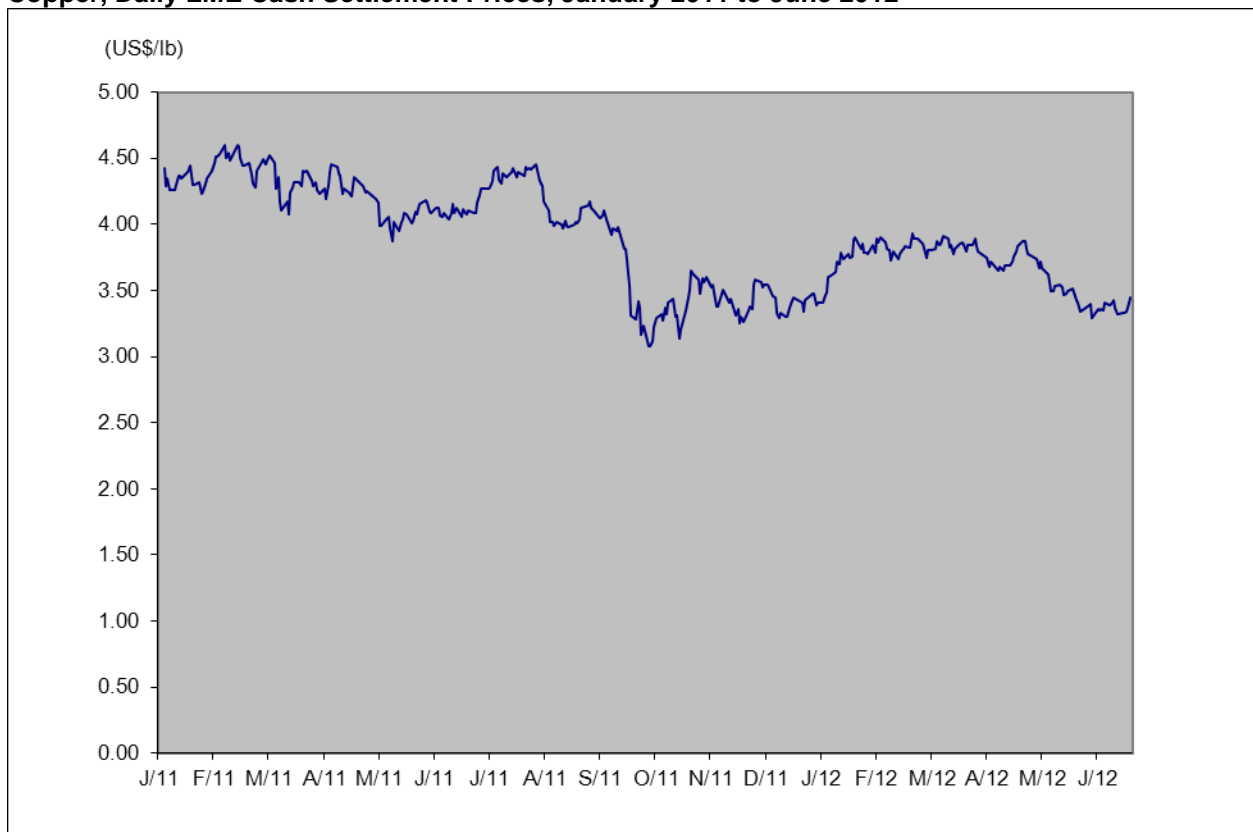
that copper is a very good electrical conductor. High conductivity means a smaller cross-section for wires relative to other metals, which is important for small motors, hand tools, and crowded conduit spaces. However, in long-distance transmission lines, the heavier density of copper relative to conductivity means that aluminum is preferred to copper as the current-carrying metal for such lines.

Copper is at the heart of the giant generators at power stations, and in transformers, electric motors of diesel locomotives, starters and generators in automobiles, and thousands of smaller electric motors, such as those used in household appliances. Its high thermal conductivity also makes copper a leading competitor for heat exchangers such as automotive radiators and those used for solar heating. Copper cables are also buried underground to form power and communication networks for cities and towns, and are laid beneath the sea to provide links between continents.

The second largest user of copper is the brass mill industry, which manufactures copper and copper alloy tube and pipe, plate, sheet and strip, rods, bars, and shapes.

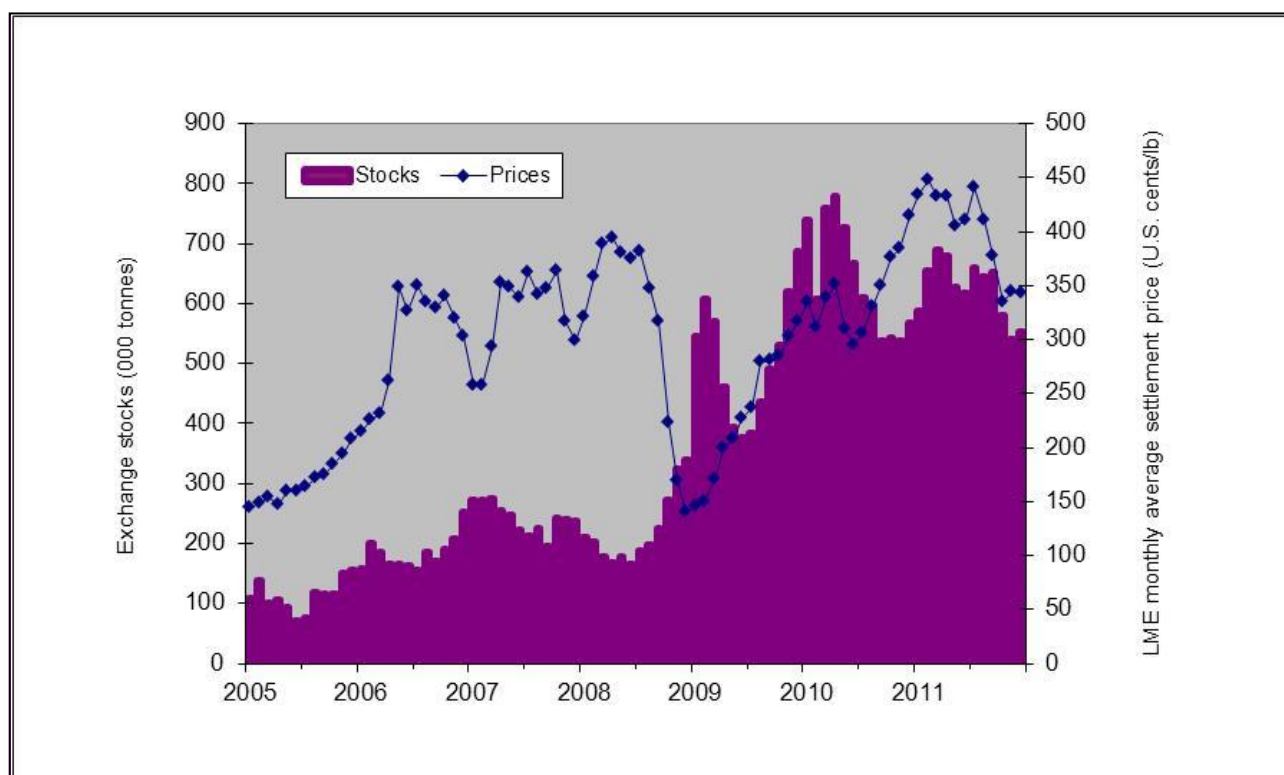
More information on the applications of copper can be found on the web sites of various copper development organizations. An extensive review of applications is also available at www.copperinfo.com/cproducts/index.html.

Figure 1
Copper, Daily LME Cash Settlement Prices, January 2011 to June 2012



Source: Metalprices.com.

Figure 2
Copper Prices and Exchange Stocks, 2005-11



Source: International Copper Study Group.

TARIFFS

Item No.	Description	Canada			United States	European Union	Japan
		MFN	GPT	USA	Canada	Conventional Rate (1)	WTO (2)
26.03	Copper ores and concentrates	Free	Free	Free	Free	Free	Free
26.04	Nickel ores and concentrates	Free	Free	Free	Free	Free	Free
26.07	Lead ores and concentrates	Free	Free	Free	Free	Free	Free
26.08	Zinc ores and concentrates	Free	Free	Free	Free	Free	Free
2616.10	Precious metal ores and concentrates: silver ores and concentrates	Free	Free	Free	Free	Free	Free
2620.30	Slag, ash and residues (other than from the manufacture of iron or steel) containing metals, arsenic or their compounds: containing mainly copper	Free	Free	Free	Free	Free	Free
2825.50	Hydrazine and hydroxylamine and their inorganic salts; other inorganic bases; other metal oxides, hydroxides and peroxides: copper oxides and hydroxides	Free	Free	Free	Free	3.2%	4.8%
2833.25	Sulphates; alums; peroxosulphates (persulphates): other sulphates: of copper	Free	Free	Free	Free	3.2%	3.9%

2836.99	Carbonates; peroxocarbonates (percarbonates); commercial ammonium carbonate containing ammonium carbamate: other: other	Free	Free	Free	Free	3.7-5.5%	3.3%
2837.19	Cyanides, cyanide oxides and complex cyanides: cyanides and cyanide oxides: other	Free	Free	Free	Free	5.5%	3.3%
3212.90	Pigments (including metallic powders and flakes) dispersed in non-aqueous media, in liquid or paste form, of a kind used in the manufacture of paints (including enamels); stamping foils; dyes and other colouring matter put up in forms or packings for retail sale: other	Free	Free	Free	Free	6.5%	2.1-4.1%
74.01	Copper mattes; cement copper (precipitated copper)	Free	Free	Free	Free	Free	Free
74.02	Unrefined copper; copper anodes for electrolytic refining	Free	Free	Free	Free	Free	Free-3%
74.03	Refined copper and copper alloys, unwrought						
7403.11	Refined copper: cathodes and sections of cathodes	Free	Free	Free	Free	Free	Free-3%
7403.12	Refined copper: wire-bars	Free	Free	Free	Free	Free	Free-3%
7403.13	Refined copper: billets	Free	Free	Free	Free	Free	Free-3%
7403.19	Refined copper: other	Free	Free	Free	Free	Free	Free-3%
7403.21	Copper alloys: copper-zinc base alloys (brass)	Free	Free	Free	Free	Free	Free
7403.22	Copper alloys: copper-tin base alloys (bronze)	Free	Free	Free	Free	Free	Free-3%
7403.29	Copper alloys: other copper alloys (other than master alloys of heading 74.05)	Free	Free	Free	Free	Free	Free-3%
74.04	Copper waste and scrap	Free	Free	Free	Free	Free	Free
74.05	Master alloys of copper	Free	Free	Free	Free	Free	3%
7406.10	Copper powders and flakes: powders of non-lamellar structure	Free	Free	Free	Free	Free	3%
7406.20	Copper powders and flakes: powders of lamellar structure; flakes	Free	Free	Free	Free	Free	3%
74.07	Copper bars, rods and profiles						
7407.10	Of refined copper	Free	Free	Free	Free	4.8%	3%
7407.21	Of copper alloys: of copper-zinc base alloys (brass)	Free	Free	Free	Free	4.8%	3%
7407.29	Of copper alloys: other	Free	Free	Free	Free	4.8%	3%
74.08	Copper wire						
7408.11	Of refined copper: of which the maximum cross-sectional dimension exceeds 6 mm	Free	Free	Free	Free	4.8%	3%
7408.19	Of refined copper: other	Free	Free	Free	Free	4.8%	3%
7408.21	Of copper alloys: of copper-zinc base alloys (brass)	Free	Free	Free	Free	4.8%	3%
7408.22	Of copper alloys: of copper-nickel base alloys (cupro-nickel) or copper-nickel-zinc base alloys (nickel-silver)	Free	Free	Free	Free	4.8%	3%
7408.29	Of copper alloys: other	Free	Free	Free	Free	4.8%	3%
74.09	Copper plates, sheets and strip, of a thickness exceeding 0.15 mm						
7409.11	Of refined copper: in coils	Free	Free	Free	Free	4.8%	3%
7409.19	Of refined copper: other	Free	Free	Free	Free	4.8%	3%
7409.21	Of copper-zinc base alloys (brass): in coils	Free	Free	Free	Free	4.8%	3%
7409.29	Of copper-zinc base alloys (brass): other	Free	Free	Free	Free	4.8%	3%
7409.31	Of copper-tin base alloys (bronze): in coils	Free	Free	Free	Free	4.8%	3%
7409.39	Of copper-tin base alloys (bronze): other	Free	Free	Free	Free	4.8%	3%
7409.40	Of copper-nickel base alloys (cupro-nickel) or copper-nickel-zinc base alloys (nickel-silver)	Free	Free	Free	Free	4.8%	3%
7409.90	Of other copper alloys	Free	Free	Free	Free	4.8%	3%
74.10	Copper foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials), of a thickness (excluding any backing) not exceeding 0.15 mm						
7410.11	Not backed: of refined copper	Free	Free	Free	Free	5.2%	3%
7410.12	Not backed: of copper alloys	Free	Free	Free	Free	5.2%	3%

7410.21	Backed: of refined copper	Free	Free	Free	Free	5.2%	3%
7410.22	Backed: of copper alloys	Free	Free	Free	Free	5.2%	3%
74.11	Copper tubes and pipes						
7411.10	Of refined copper	Free	Free	Free	Free	4.8%	3%
7411.21	Of copper alloys: of copper-zinc base alloys (brass)	Free	Free	Free	Free	4.8%	3%
7411.22	Of copper alloys: of copper-nickel base alloys (cupro-nickel) or copper-nickel-zinc base alloys (nickel-silver)	Free	Free	Free	Free	4.8%	3%
7411.29	Of copper alloys: other	Free	Free	Free	Free	4.8%	3%
74.12	Copper tube or pipe fittings (for example, couplings, elbows, sleeves)						
7412.10	Of refined copper	Free	Free	Free	Free	5.2%	Free
7412.20	Of copper alloys	Free	Free	Free	Free	5.2%	Free
74.13	Stranded wire, cables, plaited bands and the like, of copper, not electrically insulated	Free	Free	Free	Free	5.2%	3%
74.15	Nails, tacks, drawing pins, staples (other than those of heading 83.05) and similar articles, of copper or of iron or steel with heads of copper; screws, bolts, nuts, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of copper						
7415.10	Nails and tacks, drawing pins, staples and similar articles	Free	Free	Free	Free	4%	Free
7415.21	Other articles, not threaded: washers (including spring washers)	Free	Free	Free	Free	3%	Free
7415.29	Other articles, not threaded: other	Free	Free	Free	Free	3%	Free
7415.33	Other threaded articles: screws; bolts and nuts	Free	Free	Free	Free	3%	Free
7415.39	Other threaded articles: other	Free	Free	Free	Free	3%	Free
74.18	Table, kitchen or other household articles and parts thereof, of copper; pot scourers and scouring or polishing pads, gloves and the like of copper; sanitary ware and parts thereof, of copper						
7418.11	Pot scourers and scouring or polishing pads, gloves and the like	3%	Free	Free	Free	3%	Free
7418.19	Other	3%	Free	Free	Free	3-4%	Free
7418.20	Sanitary ware and parts thereof	3%	Free	Free	Free	3%	Free
74.19	Other articles of copper						
7419.10	Chain and parts thereof	3%	Free	Free	Free	3%	Free
7419.91	Other: cast, moulded, stamped or forged, but not further worked	Free-3%	Free	Free	Free	3%	Free
7419.99	Other: other	Free-9.5%	Free-5%	Free	Free	3-4.3%	Free

Sources: Canadian *Customs Tariff*, effective January 2011, Canada Border Services Agency; *Harmonized Tariff Schedule of the United States*, 2011; *Official Journal of the European Union* (Tariff Information), October 29, 2010 edition; *Customs Tariff Schedules of Japan*, 2011.

GPT General Preferential Tariff; mm Millimetres; MFN Most Favoured Nation; WTO World Trade Organization.

(1) The customs duties applicable to imported goods originating in countries that are Contracting Parties to the General Agreement on Tariffs and Trade or with which the European Community has concluded agreements containing the most-favoured-nation tariff clause shall be the conventional duties shown in column 3 of the Schedule of Duties. (2) WTO rate is shown; lower tariff rates may apply circumstantially.

TABLE 1. CANADA, COPPER MINE PRODUCTION, SHIPMENTS, AND TRADE, 2009-11

	2009		2010		2011 (p)	
	(kilograms)	(\$000)	(kilograms)	(\$000)	(kilograms)	(\$000)
MINE PRODUCTION (1)	484 605 134	..	522 171 782	..	568 990 220	..
SHIPMENTS (2)						
Newfoundland and Labrador	37 296 614	219 341	48 369 100	375 393	67 073 524	609 967
New Brunswick	7 949 453	46 751	8 429 814	65 424	9 211 395	83 768
Quebec	29 169 466	171 546	23 383 841	181 482	20 272 778	184 361
Ontario	116 343 727	684 217	154 096 230	1 195 941	207 444 606	1 886 501
Manitoba	49 260 170	289 699	53 254 298	413 307	55 959 833	508 899
British Columbia	206 824 313	1 216 334	195 925 356	1 520 577	169 607 828	1 542 414
Yukon	23 503 479	138 224	24 424 020	189 555	21 336 386	194 033
Northwest Territories	—	—	—	—	221 958	2 018
Total	470 347 222	2 766 112	507 882 659	3 941 677	551 128 309	5 011 961
Refined	335 896 327	..	319 618 720	..	273 760 547	..
	(tonnes)	(\$000)	(tonnes)	(\$000)	(tonnes)	(\$000)
EXPORTS						
2603.00.10	Copper ores and concentrates: copper content					
	Japan	72 720	398 187	86 276	650 166	112 019
	China	53 497	265 533	56 745	434 915	94 149
	South Korea	31 732	175 110	15 136	118 256	23 291
	United States	42 890	126 860	22 132	90 209	31 082
	Germany	13 574	82 949	16 138	127 352	17 512
	Bulgaria	5 877	24 842	12 604	95 204	25 342
	Philippines	21 115	121 524	18 417	140 273	13 814
	Sweden	9 340	59 736	11 379	92 909	13 306
	Finland	—	—	—	—	10 537
	India	3 784	20 694	6 682	49 866	8 635
	Spain	2 781	15 690	—	—	7 888
	Taiwan	—	—	—	—	2 928
	Chile	—	—	—	—	2 432
	Brazil	—	—	—	—	2 486
	Other countries	—	—	—	—	2 729
	Total	257 310	1 291 125	245 509	1 799 150	368 150
2604.00.00.10, 2607.00.00.10, 2608.00.00.10, 2616.10.00.10	Silver ores and concentrates: copper content					
	Finland	—	—	—	—	3 219
	Germany	45	966	67	464	200
	China	29	47	58	161	366
	Other countries	400	995	—	—	...
	Total	474	2 008	125	625	3 785
2620.30	Copper ash and residues					
	United States	451	1 476	310	1 117	239
	Laos	—	—	—	—	149
	South Korea	—	—	—	—	8
	China	78	175	461	2 887	...
	Total	529	1 651	771	4 004	396
2825.50	Copper oxides and hydroxides					
	Kazakhstan	—	—	—	—	4
2833.25	Copper sulphates					
	United States	4 350	7 427	4 517	9 484	4 333
	Malaysia	—	—	—	—	105
	India	—	—	26	44	67
	South Korea	12	21	6	75	...

	Philippines	–	–	28	48	19	32
	Thailand	–	–	–	–	13	22
	Australia	–	–	–	–	3	5
	Greece	3	4	28	48	1	1
	Other countries	30	66	231	391	...	...
	Total	4 395	7 518	4 836	10 090	4 541	11 118
7401.00	Copper mattes; cement copper (precipitated copper)						
	Norway	19 080	106 643	21 575	160 136	21 268	174 160
	Belgium	–	–	3 803	9 451	7 298	21 389
	Laos	–	–	361	1 007	810	1 991
	South Korea	–	–	3 237	4 857	246	1 484
	Mexico	1 101	437	1 332	1 442	211	1 264
	Germany	–	–	–	–	100	1 024
	Australia	67	229	128	743	80	478
	United States	–	–	–	–	43	301
	United Kingdom	–	–	–	–	52	158
	Vietnam	–	–	–	–	13	81
	China	2 976	2 554	4	23	11	69
	Kuwait	–	–	–	–	...	1
	Total	23 224	109 863	30 440	177 659	30 132	202 400
7402.00	Copper anodes						
	United States	62 073	342 770	21 857	162 149	2	55
	United Kingdom	10	32	31	145	10	43
	New Zealand	–	–	–	–	3	16
	Chile	–	–	–	–	2	12
	Australia	2	13	5	29	1	5
	Cuba	–	–	–	–	1	4
	Other countries	1	3	7	41	–	–
	Total	62 086	342 818	21 900	162 364	19	135
7403.11 to 7403.19	Refined copper and copper alloys, unwrought; refined copper						
	United States	189 301	1 032 672	167 814	1 270 755	137 770	1 210 780
	South Korea	201	412	...	2	604	5 374
	Taiwan	207	823	–	–	201	1 902
	India	6	35	2	11	37	224
	United Kingdom	2 570	9 751	–	–	1	8
	Other countries	29 354	119 899	16 512	125 162	...	3
	Total	221 639	1 163 592	184 328	1 395 930	138 613	1 218 291
7403.21 to 7403.29	Refined copper and copper alloys, unwrought; other copper alloys						
	United States	1 634	10 274	2 588	19 248	2 520	21 861
	India	211	1 060	278	1 798	208	1 563
	Germany	–	–	...	1	1	5
	Algeria	–	–	–	–	1	5
	China	...	...	...	...	1	4
	Australia	–	–	–	–	1	3
	Other countries	10	55	8	49	...	2
	Total	1 855	11 389	2 874	21 096	2 732	23 443
7404.00	Copper waste and scrap						
	China	106 106	208 603	103 828	295 047	114 712	359 630
	United States	32 157	144 786	41 524	216 000	49 392	282 145
	South Korea	799	3 027	2 465	11 865	3 496	22 194
	Germany	77	321	142	763	2 160	16 106
	Hong Kong	1 915	3 730	2 015	3 631	3 217	7 847

	Belgium	1 898	2 257	3 238	12 478	1 208	5 204
	Italy	180	1 034	456	2 221	952	4 714
	Netherlands	90	135	387	2 411	737	3 640
	India	565	1 646	367	1 564	674	1 798
	Pakistan	113	60	438	322	804	768
	Australia	7	195	41	353	107	646
	Japan	174	817	223	988	93	500
	Other countries	2 489	3 961	2 665	5 075	1 022	2 505
	Total	146 570	370 572	157 789	552 718	178 574	707 697
7405.00	Master alloys of copper						
	United States	—	—	18	87	...	8
	Sweden	48	614	—	—	—	—
	Total	48	614	18	87	...	8
7406.10 to 7406.20	Copper powders and flakes						
	Germany	4	33	29	253	18	172
	China	—	—	—	—	6	45
	United States	13	155	22	355	...	11
	Other countries	...	2	...	2	...	3
	Total	17	190	51	610	24	231
7407.10 to 7407.29	Copper bars, rods and profiles of refined copper and copper alloys						
	United States	1 226	9 540	3 395	29 182	3 662	36 731
	South Africa	8	98	8	91	22	262
	China	...	1	1	12	13	123
	Ghana	—	—	—	—	5	62
	Spain	—	—	21	251	4	60
	Cuba	...	1	3	42	4	48
	Germany	4	40	2	21	3	30
	Hong Kong	—	—	5	55	2	27
	Netherlands	—	—	...	...	1	11
	Other countries	15	209	65	734	1	23
	Total	1 253	9 889	3 500	30 388	3 717	37 377
7408.11 to 7408.29	Copper wire of refined copper and copper alloys						
	United States	89 511	516 385	99 832	770 758	105 982	958 710
	Trinidad and Tobago	1 086	5 533	311	2 606	1 309	12 331
	Cuba	408	2 802	967	7 570	1 351	11 555
	Nicaragua	—	—	2 265	19 068	1 093	10 318
	Colombia	2 681	25 583	1 791	14 092	1 058	9 940
	Dominican Republic	1 072	5 987	242	1 894	331	2 964
	Jamaica	318	1 787	352	2 718	266	2 460
	Barbados	185	1 051	229	1 365	304	1 675
	Taiwan	—	—	—	—	169	1 413
	United Arab Emirates	112	469	99	720	137	1 335
	Other countries	999	7 156	303	2 613	187	1 172
	Total	96 372	566 753	106 391	823 404	112 187	1 013 873
7409.11 to 7410.22	Copper and copper alloy plates, sheets, strip and foil						
	Luxembourg	—	—	—	—	20	185
	India	...	1	...	1	100	82
	South Korea	—	—	—	—	3	31
	Hungary	—	—	—	—	3	30
	Hong Kong	41	291	21	132	...	12
	Taiwan	—	—	20	149	...	11
	Brazil	1	13	...	3	1	10

	Other countries	32	281	42	379	4	35
	Total	74	586	83	664	131	396
7411.10 to 7411.29	Copper tubes and pipes						
	United States	9 839	74 122	14 231	136 738	16 324	183 613
	China	64	469	241	1 700	327	2 814
	United Kingdom	39	354	177	1 684	222	2 488
	Australia	12	119	—	—	54	633
	India	390	4 348	338	3 920	16	203
	Singapore	54	649	45	510	8	110
	Indonesia	4	44	5	62	11	109
	Other countries	101	1 017	97	1 089	64	644
	Total	10 503	81 122	15 134	145 703	17 026	190 614
		(n.a.)	(\$000)	(n.a.)	(\$000)	(n.a.)	(\$000)
7412.10 to 7412.20	Copper tube or pipe fittings (for example, couplings, elbows, sleeves)						
	United States	..	24 304	..	21 624	..	21 029
	Ireland	..	...	..	7	..	756
	Poland	..	1	..	82	..	245
	Australia	..	92	..	93	..	170
	United Kingdom	..	6	..	14	..	170
	South Africa	..	55	..	49	..	80
	France	..	5	..	9	..	79
	China	..	429	..	43	..	54
	Trinidad and Tobago	..	24	..	7	..	54
	Mexico	..	43	..	47	..	53
	United Arab Emirates	..	54	..	48	..	53
	Other countries	..	879	..	737	..	299
	Total	..	25 892	..	22 760	..	23 042
		(tonnes)	(\$000)	(tonnes)	(\$000)	(tonnes)	(\$000)
7413.00	Stranded wire, cables, plaited bands and the like, of copper, not electrically insulated						
	United States	315	3 631	586	5 383	581	6 003
	China	...	3	23	173	12	49
	Hungary	...	5	...	2	4	31
	Trinidad and Tobago	—	—	...	3	4	30
	Cuba	—	—	17	134	2	22
	India	1	9	...	...	1	12
	Other countries	75	605	24	206	3	26
	Total	391	4 253	650	5 901	607	6 173
		(n.a.)	(\$000)	(n.a.)	(\$000)	(n.a.)	(\$000)
7414, 7415, 7416, 7419	Other items of copper						
	United States	..	18 989	..	21 266	..	32 547
	China	..	265	..	746	..	658
	United Kingdom	..	406	..	62	..	481
	Mexico	..	173	..	217	..	408
	United Arab Emirates	..	384	..	365	..	218
	Italy	..	58	..	62	..	213
	Ireland	..	9	..	...	..	189
	Singapore	..	222	..	211	..	136

	Germany	..	278	..	242	..	118
	Other countries	..	2 542	..	2 007	..	1 537
	Total	..	23 326	..	25 178	..	36 505
Total exports		..	4 013 161	..	5 178 331	..	6 408 430
		(tonnes)	(\$000)	(tonnes)	(\$000)	(tonnes)	(\$000)
IMPORTS (1)							
2603.00.00.10	Copper ores and concentrates: copper content						
	United States	23 270	108 795	12 595	92 418	14 264	123 801
	Peru	24 732	105 636	18 887	106 963	607	4 964
	Chile	...	...	12 891	90 161	42	41
	Other countries	3 588	17 475	60	369	1	3
	Total	51 590	231 906	44 433	289 911	14 914	128 809
2604.00.00.10, 2607.00.00.10, 2608.00.00.10, 2616.10.00.10	Other ores and concentrates: copper content						
	Australia	690	3 829	716	5 235	883	6 906
	Spain	—	—	70	496	656	4 675
	South Africa	318	1 183	—	—	1	6
	Chile	...	...	13	3	1	1
	Other countries	...	...	44	38	4	...
	Total	1 008	5 012	843	5 772	1 545	11 588
2620.30	Copper ash and residues						
	United States	41 376	58 703	52 251	88 221	45 077	75 210
	Germany	3 883	8 450	3 855	11 341	3 388	9 858
	Taiwan	4 016	9 624	8 415	12 724	8 876	8 858
	Norway	—	—	—	—	282	1 375
	Zimbabwe	—	—	—	—	186	926
	Canada	—	—	—	—	194	267
	Other countries	9 737	11 316	5 777	1 109	—	—
	Total	59 012	88 093	70 298	113 395	58 003	96 494
2825.50.00.10 to 2825.50.00.20	Copper oxides and hydroxides						
	United States	1 392	7 433	2 038	8 632	2 382	11 979
	China	14	44	66	192	45	131
	Australia	—	—	—	—	16	62
	Other countries	4	16	6	19	2	7
	Total	1 410	7 493	2 110	8 843	2 445	12 179
2833.25	Copper sulphates						
	Russia	4 027	9 852	8 290	19 365	11 160	30 560
	Chile	5 210	8 724	6 387	12 389	4 920	12 023
	United States	2 343	5 254	2 022	4 924	2 344	6 380
	Mexico	243	510	559	1 321	2 000	5 638
	China	4 935	12 312	3 547	10 520	1 719	4 590
	Taiwan	1 059	2 494	1 162	2 996	823	2 165
	Peru	387	801	459	981	294	730
	Other countries	270	558	386	978	78	400
	Total	18 474	40 505	22 812	53 474	23 338	62 486
2836.99.10.20	Copper carbonates						
	United States	1	2	1	2	...	...
2836.99.90.10	Other copper carbonates						
	United States	4	9	17	38	53	119
	Brazil	—	—	—	—	32	72
	China	1	2	2	3	...	1
	Other countries	2	4	7	16	...	...
	Total	7	15	26	57	85	192

2837.19.00.10	Copper cyanides						
	United States	9	74	16	102	15	101
	South Korea	1	9	2	18	10	70
	Other countries	...	...	1	6	...	1
	Total	10	83	19	126	25	172
3212.90.90.12	Pigments based on copper or copper alloy powders and flakes						
	United States	19	214	39	478	24	309
	Germany	1	23	2	36	10	174
	Other countries	...	4	...	2	...	...
	Total	20	241	41	516	34	483
7401.00.00.10	Copper mattes						
	China	...	...	...	1	1	1
	United States	1 085	1 322	...	...	...	1
	Germany	–	–	1	1	–	–
	Russia	–	–	169	179	–	–
	Total	1 085	1 322	170	181	1	2
7401.00.00.20	Cement copper (precipitated copper)						
	United States	–	–	1	2	...	...
	China	–	–	–	–	...	...
	Total	–	–	1	2	...	...
7402.00.00.10 to 7402.00.00.20	Copper anodes						
	Chile	69 956	368 627	43 908	311 069	14 997	131 503
	United States	11 861	39 473	2 948	23 091	2 754	19 687
	Other countries	85	310	39	108	31	64
	Total	81 902	408 410	46 895	334 268	17 782	151 254
7403.11 to 7403.19	Refined copper and copper alloys, unwrought; refined copper						
	United States	10 441	58 343	7 205	47 028	3 387	21 484
	Japan	33	268	357	3 237	453	4 362
	Germany	64	433	151	1 219	263	2 524
	Chile	3	25	81	577	177	1 557
	Other countries	30	194	64	520	49	440
	Total	10 571	59 263	7 858	52 581	4 329	30 367
7403.21 to 7403.29	Refined copper and copper alloys, unwrought; other copper alloys						
	United States	4 742	20 271	5 833	29 886	4 377	35 903
	China	27	250	21	196	24	283
	United Kingdom	2	45	...	7	5	131
	Germany	1	43	3	106	2	105
	France	1	14	1	19	3	97
	Canada	3	37	1	2	2	49
	Netherlands	–	–	–	–	...	38
	Italy	4	41	2	29	8	35
	India	1	16	2	30	1	22
	Other countries	6	111	3	60	...	36
	Total	4 787	20 828	5 866	30 335	4 422	36 699
7404.00	Copper waste and scrap						
	United States	39 600	139 133	48 006	224 662	64 598	294 545
	Cuba	1 215	5 383	1 451	7 153	786	3 280
	Jamaica	36	251	105	814	114	936
	China	17	139	42	288	23	195
	Other countries	471	1 223	24 124	4 638	159	362
	Total	41 339	146 129	73 728	237 555	65 680	299 318
7405.00	Master alloys of copper						

	United States	49	371	153	1 435	262	2 748
	Italy	5	46	5	39	3	29
	United Kingdom	–	–	–	–	2	18
	Other countries	47	349	1	19	1	7
	Total	101	766	159	1 493	268	2 802
7406.10 to 7406.20	Copper powders and flakes						
	United States	1 780	11 579	2 399	19 058	2 031	19 050
	France	40	331	119	1 028	79	821
	Germany	8	96	8	103	35	445
	Other countries	116	919	44	383	4	71
	Total	1 944	12 925	2 570	20 572	2 149	20 387
7407.10 to 7407.29	Copper bars, rods and profiles of refined copper and copper alloys						
	United States	15 771	90 046	16 497	119 505	19 256	163 488
	South Korea	464	3 026	1 059	7 715	1 279	11 341
	France	212	1 742	196	1 939	362	3 992
	Germany	200	1 952	225	1 938	310	3 354
	Peru	76	601	183	1 683	322	3 197
	China	358	3 172	307	4 530	144	2 577
	Poland	59	371	306	1 947	335	2 352
	United Kingdom	56	781	67	861	124	1 588
	Mexico	222	2 109	226	2 137	107	1 149
	Bulgaria	17	93	14	118	119	1 074
	India	245	1 523	97	829	114	879
	Italy	72	608	53	391	102	857
	Other countries	436	3 161	757	5 846	217	2 241
	Total	18 188	109 185	19 987	149 439	22 791	198 089
7408.11 to 7408.29	Copper wire of refined copper and copper alloys						
	United States	36 476	214 410	37 764	281 787	40 419	355 089
	Germany	119	1 397	132	1 751	161	1 963
	France	36	888	39	990	53	1 435
	South Korea	140	994	131	1 039	146	1 371
	China	54	412	127	954	105	1 161
	Malaysia	49	327	62	334	87	801
	Mexico	84	663	63	568	76	685
	Vietnam	21	257	53	482	48	529
	Japan	22	232	28	327	26	348
	Other countries	119	1 113	97	1 022	61	767
	Total	37 120	220 693	38 496	289 254	41 182	364 149
7409.11 to 7410.22	Copper and copper alloy plates, sheets, strip and foil						
	United States	10 021	87 971	11 818	111 132	12 029	120 884
	Germany	2 006	14 726	1 716	15 768	1 660	17 506
	Japan	88	3 397	103	4 359	220	8 760
	Bulgaria	596	4 512	438	3 829	729	7 333
	Netherlands	370	2 520	856	6 760	704	7 215
	China	1 037	5 108	1 328	7 475	836	6 870
	Sweden	228	1 974	449	4 489	569	6 469
	Luxembourg	453	7 192	388	5 827	423	5 810
	India	1 542	9 887	1 090	7 513	431	3 750
	Taiwan	196	3 051	198	3 271	178	2 951
	France	79	2 768	181	3 338	179	2 046
	Other countries	272	2 095	493	4 534	376	3 876
	Total	16 888	145 201	19 058	178 295	18 334	193 470

7411.10	Copper tubes and pipes of refined copper						
	United States	4 550	43 162	7 795	71 186	7 051	65 633
	South Korea	902	6 303	1 436	12 137	2 247	22 822
	China	1 932	14 073	2 282	20 496	2 074	21 839
	Chile	1 278	8 814	1 680	12 347	712	7 165
	Greece	18	143	–	–	574	5 798
	Mexico	736	6 792	763	7 058	531	4 701
	Hong Kong	58	317	11	98	305	2 962
	Germany	66	832	156	1 563	68	1 333
	Vietnam	–	–	...	2	108	1 104
	Other countries	367	3 816	194	2 171	100	1 603
	Total	9 907	84 252	14 317	127 058	13 770	134 960
7411.21	Pipes and tubes, copper-zinc base alloys						
	China	529	4 505	538	5 568	481	5 569
	South Korea	2	25	75	673	794	5 044
	United States	292	3 350	200	2 601	188	2 616
	Germany	161	1 249	169	1 535	146	1 607
	Singapore	–	–	–	–	10	403
	Cyprus	–	–	11	101	47	305
	Mexico	79	699	115	1 102	24	299
	Serbia	67	419	39	311	31	280
	Taiwan	10	141	11	189	18	240
	United Kingdom	3	59	4	95	4	157
	Thailand	1	15	7	83	19	151
	Portugal	29	118	44	181	25	143
	Other countries	67	637	15	180	15	242
	Total	1 240	11 217	1 228	12 619	1 802	17 056
7411.22	Pipes and tubes, copper-nickel base alloys or copper-nickel-zinc base alloys						
	United States	135	2 442	176	3 065	158	2 593
	Mexico	42	531	37	495	115	2 035
	China	77	784	200	2 467	160	1 961
	Hong Kong	1	7	47	486	36	487
	United Kingdom	8	302	4	115	14	397
	Other countries	13	242	108	1 038	16	112
	Total	276	4 308	572	7 666	499	7 585
7411.29	Plates and tubes, copper alloys, n.e.s.						
	United States	617	7 661	869	11 440	818	12 199
	China	195	1 464	225	1 858	215	1 937
	South Korea	23	155	27	277	132	1 241
	Mexico	7	161	23	279	80	469
	France	1	32	4	94	9	226
	Other countries	15	256	40	487	22	262
	Total	858	9 729	1 188	14 435	1 276	16 334
7412.10	Fittings, pipe or tube, of refined copper						
	United States	742	12 364	925	12 462	777	10 826
	South Korea	1 253	11 300	873	10 158	707	10 147
	China	361	4 277	735	8 083	557	8 055
	Germany	52	1 889	67	2 835	63	3 247
	Vietnam	–	–	20	206	121	1 506
	Spain	37	468	129	1 638	52	791
	United Kingdom	8	156	8	143	16	341
	Poland	14	206	13	222	10	142

	Other countries	50	738	38	474	31	298
	Total	2 517	31 398	2 808	36 221	2 334	35 353
7412.20	Fittings, pipe or tube, copper alloys						
	United States	3 996	31 778	3 943	34 654	4 297	36 772
	China	3 288	23 906	3 858	33 491	4 066	35 755
	Taiwan	760	7 107	1 128	11 588	1 070	13 091
	Australia	116	4 084	150	4 601	448	7 074
	Italy	219	1 997	395	3 336	450	3 320
	Indonesia	247	1 588	389	2 905	299	2 969
	Germany	123	2 415	108	2 112	108	2 581
	Mexico	139	1 103	144	1 359	153	1 698
	South Korea	1 793	1 792	1 756	3 162	436	1 420
	India	63	747	77	988	90	1 226
	Thailand	79	790	98	1 085	55	804
	Other countries	241	2 895	179	2 850	347	4 006
	Total	11 064	80 202	12 225	102 131	11 819	110 716
7413.00	Stranded wire, cables, plaited bands and the like, of copper, not electrically insulated						
	United States	9 303	53 698	12 462	91 883	15 849	134 363
	Germany	55	258	44	472	59	769
	Mexico	5	70	10	141	11	331
	Thailand	9	77	35	256	29	320
	Canada	6	35	6	84	9	160
	South Korea	—	—	—	—	19	159
	Israel	1	11	—	—	14	145
	China	19	149	16	111	19	119
	Other countries	28	171	25	183	31	246
	Total	9 426	54 469	12 598	93 130	16 040	136 612
7415.10	Nails, tacks, drawing pins, staples and similar articles of copper or of iron or steel with copper heads						
	United States	44	331	37	316	31	414
	China	45	175	31	191	52	264
	Taiwan	9	85	19	151	25	139
	Italy	2	16	2	9	2	35
	Germany	...	5	2	22	5	28
	Japan	1	9	1	8	3	26
	South Korea	...	...	...	...	1	8
	Belgium	1	5	1	8	1	8
	Other countries	1	7	1	17	2	23
	Total	103	633	94	722	122	945
7415.21	Copper washers, including spring washers						
	United States	372	1 399	1 369	1 589	661	1 743
	China	141	506	279	731	253	722
	United Kingdom	16	184	22	239	34	414
	India	2	33	5	64	15	203
	Germany	52	105	36	92	50	119
	Other countries	1 435	459	182	287	20	443
	Total	2 018	2 686	1 893	3 002	1 033	3 644
7415.29	Articles of copper, not threaded, n.e.s., similar to those of headings 7415.10 and 7415.21						
	United States	214	2 378	205	2 540	203	2 141
	Canada	6	94	4	101	8	313
	China	33	300	53	275	75	162
	Germany	6	71	8	111	9	153
	New Zealand	7	134	4	87	7	129

	Other countries	55	329	152	456	42	540
	Total	321	3 306	426	3 570	344	3 438
7415.33	Screws, bolts and nuts of copper, excluding wood screws						
	United States	564	2 862	646	4 155	653	3 470
	China	132	1 036	283	1 762	264	1 576
	Taiwan	325	1 211	378	1 335	343	1 423
	Germany	162	295	190	259	225	458
	Indonesia	7	110	13	157	24	194
	Other countries	81	451	185	794	119	654
	Total	1 271	5 965	1 695	8 462	1 628	7 775
7415.39	Articles of copper, threaded, n.e.s., similar to bolts, nuts and screws						
	United States	452	2 564	317	3 666	474	4 216
	China	81	1 016	55	907	97	1 220
	Germany	11	444	13	412	11	450
	Taiwan	35	228	50	344	36	406
	Other countries	14	242	23	294	27	376
	Total	593	4 494	458	5 623	645	6 668
7419.10	Chain and parts thereof of copper						
	United States	24	216	21	139	20	149
	China	13	79	54	144	35	101
	India	...	5	...	1	1	27
	Other countries	4	53	4	62	6	54
	Total	41	353	79	346	62	331
7419.91	Articles of copper, not further worked than cast, moulded, stamped or forged.						
	United States	674	11 094	1 583	12 338	1 662	13 639
	China	94	568	33	341	58	485
	Italy	45	606	67	912	13	367
	Taiwan	86	211	103	437	70	258
	Indonesia	24	311	12	145	9	113
	Other countries	50	444	21	159	15	151
	Total	973	13 234	1 819	14 332	1 827	15 013
		(n.a.)	(\$000)	(n.a.)	(\$000)	(n.a.)	(\$000)
7419.99	Articles of copper, n.e.s.						
	United States	..	22 170	..	24 168	..	24 873
	China	..	9 569	..	10 323	..	7 957
	Taiwan	..	3 005	..	3 006	..	3 256
	India	..	1 873	..	2 309	..	3 130
	United Kingdom	..	994	..	536	..	2 144
	Germany	..	1 506	..	1 426	..	1 328
	Finland	..	291	..	815	..	1 194
	Italy	..	1 059	..	1 810	..	826
	Thailand	..	766	..	863	..	659
	Mexico	..	560	..	586	..	611
	France	..	584	..	465	..	478
	Indonesia	..	376	..	389	..	423
	Japan	..	135	..	178	..	258
	Hong Kong	..	61	..	188	..	158
	Canada	..	271	..	130	..	111
	Spain	..	24	..	64	..	105
	Other countries	..	717	..	844	..	618
	Total	..	43 961	..	48 100	..	48 129
Total imports		..	1 848 279	..	2 243 488	..	2 153 499

Sources: Natural Resources Canada; Statistics Canada.

– Nil; . . Not available; . . . Amount too small to be expressed; n.a. Not applicable; n.e.s. Not elsewhere specified; (p) Preliminary.

(1) Copper contained in concentrates produced. (2) Anode copper recovered in Canada from domestic concentrates plus exports of payable copper in concentrate and matte. (3) Imports from "Other countries" may include re-imports from Canada.

Notes: Harmonized System (HS) code change from 7401.10 and 7401.20 to 7401.00.00 as of 2007. HS code change from 7401.10 to 7401.00.00.10 as of 2007. HS code change from 7401.20 to 7401.00.00.20 as of 2007. HS code change from 7414.20, 7414.90 and 7416.00 to 7419.99.90.90 as of 2007. Numbers may not add to totals due to rounding. HS code descriptions in this table may have been abbreviated. For detailed HS code descriptions related to this commodity, please refer to the corresponding tariffs table.

TABLE 2. CANADA, COPPER PRODUCTION, TRADE (1) AND USE, HISTORICAL, 1988-2011

Year	Production		Exports			Imports	Use
	Shipments (2)	Refinery Output	Concentrates and Matte (6)	Refined (5)	Total (4)	Refined (7)	Refined (3)
	(tonnes)						
1988	758 478	528 723	348 404	268 680	617 084	4 660	236 281
1989	704 432	515 216	348 811	321 690	670 501	4 408	213 046
1990	771 433	515 835	374 875	335 941	710 816	2 611	180 605
1991	780 362	538 339	348 080	377 985	726 065	2 321	159 170
1992	761 694	539 302	346 842	385 761	732 603	8 916	156 132
1993	709 650	561 580	319 840	408 364	728 204	21 155	185 565
1994	590 784	549 869	237 553	388 568	626 121	19 594	199 350
1995	700 843	572 616	274 492	434 691	709 183	24 176	189 550
1996	652 499	559 200	409 578	384 337	793 915	28 700	218 280
1997	647 779	560 582	515 547	381 475	897 023	22 602	224 776
1998	690 762	562 261	433 685	355 826	789 511	18 685	246 212
1999	581 583	548 563	355 839	294 107	649 946	16 475	266 504
2000	621 889	551 393	426 007	288 334	714 341	11 875	272 076
2001	614 312	567 720	359 634	308 898	668 531	7 994	265 210
2002	584 195	494 522	311 920	238 117	550 036	11 692	274 133
2003	540 998	454 866	196 538	218 810	415 349	21 712	257 338
2004	544 558	526 955	180 910	279 741	460 651	53 336	297 184
2005	577 304	515 223	275 281	296 958	572 238	64 638	289 721
2006	586 489	500 463	288 939	279 946	568 885	58 715	300 567
2007	577 545	453 453	219 771	297 713	517 484	11 715	206 048
2008	584 003	442 050	357 307	289 991	647 298	11 652	..
2009	470 347	(r) 335 896	257 785	221 641	479 425	10 570	..
2010	507 883	319 619	245 635	184 328	429 963	7 857	..
2011 (p)	551 128	273 761	371 937	138 614	510 552	4 330	..

Sources: Natural Resources Canada; Statistics Canada.

.. Not available; (p) Preliminary; (r) Revised.

(1) Beginning in 1988, exports and imports are based on the new Harmonized System (HS) and may not be in complete accordance with previous method of reporting. (2) From 1975 to 1988, anode copper recovered in Canada from domestic concentrate plus exports of payable copper in concentrates and matte. Starting in 1989 to date, recoverable copper in concentrate shipped. (3) Producers' domestic shipments of refined copper plus imports of refined shapes. (4) Data include HS codes 2603.00.10, 2604.00.00.10, 2607.00.00.10, 2608.00.00.10, 2616.10.00.10, 7401.10, and 7401.20. (5) Data include HS codes 7403.11 to 7403.19. (6) Data include HS codes 2603.00.10, 2604.00.00.10, 2607.00.00.10, 2608.00.00.10 and 2616.10.00.10. (7) Data include HS codes 7403.11 to 7403.19.

Notes: Numbers may not add to totals due to rounding. The Use survey is currently suspended by Natural Resources Canada.

TABLE 3. RECENT WORLD COPPER DATA, 2009-11

	2009	2010	2011	2010/09	2011/10
	(000 tonnes)			(% change)	
Mine production	15 903	16 036	16 035	0.8	0.0
Primary refined production	15 491	15 707	16 167	1.4	2.9
Secondary refined production	2 830	3 250	3 483	14.8	7.2
Total refined production	18 321	18 957	19 650	3.5	3.7
Usage (consumption)	18 152	19 384	19 888	6.8	2.6
Refined balance (1)	168	-427	-238	n.a.	n.a.
Refined stocks at year-end (2)	1 370	1 192	1 198	..	..

Source: International Copper Study Group, August 2012 bulletin.

.. Not available; n.a. Not applicable.

(1) A surplus or deficit is calculated using total refined production minus refined usage. (2) Includes producer, consumer, government, exchange, and merchant stocks.

TABLE 4. LONDON METAL EXCHANGE COPPER PRICES, 2008-11

Price	2008	2009	2010	2011
Cash US¢/lb	315	234	342	400
Cash US\$/t	6 955	5149	7 538	8 813
3 months US\$/t	5 171	5171	7 554	8 826
15 months US\$/t	5 192	5192	7 512	8 790
27 months US\$/t	5 183	5183	7 321	8 607

Source: Bloomsbury Minerals Economics Ltd.

TABLE 5. RECENT CANADIAN COPPER DATA, 2009-11

	2009	2010	2011 (p)
	(tonnes)		
Mine output (1)	494 524	525 031	566 124
Primary mine production (2)	481 374	508 316	551 128
Reported mine production (3)	474 214	497 485	575 100
Refined production	335 896	319 200	273 761
Domestic shipments	131 554	140 780	139 682
Refined imports	10 570	7 857	4 330
Apparent copper usage (4)	142 124	148 637	144 012
Refined copper exports	221 641	184 328	138 614

Source: Natural Resources Canada (NRCan).

(p) Preliminary.

(1) Metal content in concentrates produced based on NRCan surveys.

(2) Recoverable metal in concentrates shipped based on NRCan surveys.

(3) Reported copper mine production is taken from company reports and is a mixture of copper in concentrates produced and payable copper in concentrates, depending upon the company. (4) Usage = domestic shipments + refined imports.

Note: NRCan data are rounded to the nearest 100 tonnes, except for reported copper mine production, which is rounded to the nearest 1000 tonnes.

TABLE 6. CANADIAN MINES PRODUCING COPPER IN CONCENTRATE, 2009-11

Name of Mine	Operator	2009	2010	2011
		(tonnes)		
Brunswick	Xstrata plc	7 000	8 200	8 798
Copper Mountain	Copper Mountain Mining Corp. (75%), Mitsubishi (25%)	–	–	10 024
Duck Pond	Teck Resources Limited	14 000	15 000	13 000
Gibraltar (McLeese Lake)	Taseko Mines Limited	30 890	41 050	36 650
Gibraltar SX/EW	Taseko Mines Limited	998	816	953
Highland Valley	Teck Resources Limited	118 000	99 000	97 000
Huckleberry	Imperial Metals Corp.	20 834	20 643	19 427
Hudson Bay 777 and Trout Lake	HudBay Minerals Inc.	48 397	52 413	54 324
Lac des Iles	North American Palladium Ltd.	–	298	724
Kemess South	Northgate Exploration Limited	23 812	18 461	2 800
Kidd Creek	Xstrata plc	43 600	52 568	42 322
Montcalm	Xstrata plc	1 179	–	–
Mouska	Iamgold	320	–	–
LaRonde	Agnico-Eagle	7 146	4 968	3 216
Minto	Capstone Mining Corporation	24 338	18 350	16 811
Mount Polley	Imperial Metals Corporation	15 359	15 804	11 998
Myra Falls	Breakwater Resources Limited	3 653	4 600	4 200
Perseverance	Xstrata plc	8 600	10 005	9 752
Raglan	Xstrata plc	7 188	7 134	7 215
Sudbury Operations (1)	Vale	57 000	57 000	133 000
Sudbury Division, Strathcona mill	Xstrata plc	12 000	36 074	49 887
Troilus	Inmet Mining Corporation	5 900	2 100	–
Voisey's Bay	Vale	24 000	33 000	51 000
Wolverine	Yukon Zinc Corporation	–	–	2 000
Total		474 214	497 484	575 101

Source: Author's calculations based on company reports.

– Nil.

(1) In 2011, included output from the Copper Cliff, Creighton, Stobie, Garson, Coleman, Ellen, and Totten mines, plus 31 000 tonnes of copper output reported by Vale as "feed purchased from unrelated parties."

TABLE 7. WORLD COPPER MINE PRODUCTION, (1) 2009-11

Region/Country	2009	2010	2011
	(tonnes)		
AFRICA			
Botswana	29	31	30
Congo, Democratic Republic of	310	364	454
Morocco	12	11	11
South Africa	108	103	97
Zambia	637	686	667
Others	44	45	47
Subtotal	1 140	1 240	1 306
AMERICAS			
Argentina	143	140	117
Brazil	213	214	216
Canada	495	525	566
Chile	5 394	5 418	5 262
Mexico	238	270	444

Peru	1 276	1 247	1 235
United States	1 204	1 129	1 140
Other	14	13	18
Subtotal	8 977	8 956	8 998
ASIA			
Armenia	23	25	34
China	1 062	1 180	1 299
India	30	33	32
Indonesia	956	872	543
Kazakhstan	406	380	349
Laos	122	132	139
Mongolia	129	126	124
Myanmar	4	9	9
North Korea	12	12	12
Pakistan	20	20	20
Philippines	47	59	64
Uzbekistan	80	80	80
Vietnam	11	11	11
Other Asia	328	284	287
Subtotal	3 230	3 223	3 003
EUROPE			
Bulgaria	105	105	105
Macedonia	8	8	8
Poland	439	425	427
Portugal	87	74	82
Romania	5	5	5
Russia	676	703	713
Spain	21	54	68
Turkey	105	85	79
Others	93	116	133
Subtotal	1 539	1 575	1 620
OCEANIA			
Australia	854	870	961
Papua New Guinea	167	160	131
Subtotal	1 020	1 030	1 092
Total world	15 906	16 024	16 019

Source: International Copper Study Group, October 2012 bulletin.

(1) Contained copper in all forms of mined copper.

**TABLE 8. WORLD REFINED COPPER PRODUCTION, (1)
2009-11**

Region/Country	2009	2010	2011
	(tonnes)		
AFRICA			
Congo, Democratic Republic of	170	259	355
Egypt	4	4	4
South Africa	89	76	80
Zambia	439	528	515
Others	7	7	7
Subtotal	709	874	961
AMERICAS			
Brazil	213	233	229
Canada	336	319	274
Chile	3 277	3 244	3 092
Mexico	261	247	400
Peru	423	394	367
United States	1 161	1 093	1 033
Other	27	27	28
Subtotal	5 698	5 557	5 423
ASIA			
China	4 051	4 540	5 197
India	715	657	673
Indonesia	289	278	257
Iran	210	220	227
Japan	1 440	1 549	1 328
South Korea	539	559	594
Vietnam	6	8	8
Other Asia	707	689	710
Subtotal	7 957	8 500	8 994
EUROPE			
Belgium-Luxembourg	373	381	394
Germany	669	704	709
Italy	7	2	2
Poland	503	547	571
Russia	855	890	912
Spain	329	347	354
Turkey	34	47	86
Others	691	730	768
Subtotal	3 461	3 648	3 796
OCEANIA			
Australia	446	424	477
Total world	15 906	16 024	16 019

Source: International Copper Study Group, October 2012 bulletin.

(1) Includes electrolytic, fire-refined, and electrowon copper.

TABLE 9. WORLD COPPER USAGE BY REGION OR COUNTRY, 2009-11

Region/Country	2009	2010	2011	2011/10	2010/09
	(000 tonnes)			(% change)	
United States	1 650	1 770	1 761	-0.5	7.3
Other America	912	1 085	1 041	-4.1	19.0
Europe	3 833	4 228	4 464	5.6	10.3
Japan	958	1 070	1 007	-5.9	11.7
China	7 119	7 393	7 917	7.1	3.8
Other Asia	3 255	3 422	3 296	-3.7	5.1
Oceania	130	131	120	-8.4	0.8
Africa	297	285	282	-1.1	-4.0
Total world	18 154	19 384	19 888	2.6	6.8
World excluding China	11 035	10 761	11 467	6.6	-2.5

Source: International Copper Study Group, August 2012 bulletin, Tables 2 and 7.

TABLE 10. ACTUAL AND FORECAST WORLD COPPER SUPPLY AND DEMAND, 2011-13

	2011	2012	2013	11/10	12/11	13/12
				(% change year on year)		
Mine production	16 035	16 848	18 127	-	5.1	7.6
Refined production (1)	19 650	20 149	21 549	3.4	2.5	6.9
Copper usage	19 885	20 386	21 188	2.7	2.5	3.9
Refined production, usage balance	-235	-237	361	n.a.	n.a.	n.a.

Source: International Copper Study Group, 2010-2011 Forecast, issued April 20, 2012.

- Nil; n.a. Not applicable.

(1) Net of adjustments for primary feed shortage and allowances for disruptions.