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1.2. Cobalt Market Overview

Cobalt Mine and Refinery Production and Capacities

World mine production of cobalt was approximately 000 thousand t in 2011, a 9.7% increase from 000 thousand t in 2010.

Table 1. Cobalt: world mine production, (2006-2011), metric tons

2006	2007	2008	2009	2010	2011

Figure 1. Cobalt mine production volumes, (2006-2011), metric tons

Cobalt is produced as a by-product of copper, nickel, and other metals, and as a primary product...

Table 2. Cobalt world mine production, by country (2010-2011), metric tons, cobalt content

Country	2010	2011
Australia		
Botswana		
Brazil		
Canada		
China		
Congo		
Cuba		
...		
Total		



In 2011 Congo was a world leader in cobalt mine production; its share reached 56% of world total.

Figure 2. Structure of cobalt mine production, by country, 2011

World refinery production of cobalt was approximately 000 thousand t in 2011, a 6.0% increase from 000 thousand t in 2010.

Table 3. Cobalt: world refinery production, (2006-2011), metric tons

2006	2007	2008	2009	2010	2011

Figure 3. Cobalt refinery production volumes, (2006-2011), metric tons

Table 4. Cobalt world refinery production, by country (2010-2011), metric tons

Country	2010	2011
Australia		
Belgium		
Brazil		
Canada		
China		
Congo		
Finland		
France		
India		
Japan		
...		
Total	76 000	80 600



In 2011 China was a world leader in cobalt refinery production; its share reached 44% of world total.

Figure 4. Structure of cobalt refinery production, by country, 2011

Table 5. Refined cobalt production, by producers (2006-2010), tonnes.

Table 6. World annual cobalt refinery capacity, (2010), metric tons.

Country	Capacity
Australia	
Belgium	
Brazil	
Canada	
China	
Congo	
Finland	
France	
India	
Japan	
Morocco	
Norway	
Russia	
South Africa	
Uganda	
Zambia	
Total	



3. Latin American Market of Cobalt

3.1. Brazil

In 2011 cobalt mine production in Brazil reached 000 t. Refinery production was estimated to be 000 t in 2011.

Refined cobalt production capacity totalled 000 t per year in 2010.

Table 7. Cobalt mine and refinery production in Brazil, 2006-2011 (metric tons)

	2006	2007	2008	2009	2010	2011
Production						
Mine						
Refinery						

Figure 5. Cobalt mine and refinery production trends in Brazil, 2006-2011 (metric tons)

Cobalt producers in Brazil:

Votorantim Metais Níquel S.A. (formerly Mineração Serra De Fortaleza S.A.)

Estrada João Soares da Silveira, s/n - Zona Rural

Fortaleza de Minas

Minas Gerais State

...

Table 8. Import of Cobalt ores and concentrates in Brazil, 2006-2011

	2006	2007	2008	2009	2010	2011
Export, thousand \$						
Export, tons						
Import, thousand \$						
Import, tons						
Trade balance, tons						



Figure 6. Import dynamics of Cobalt ores and concentrates in Brazil in 2006-2011, tons

Figure 7. Trade balance of Cobalt ores and concentrates in Brazil in 2006-2011, tons

Table 9. Structure of Cobalt ores and concentrates import by country in Brazil in 2010-2011

Period / Brazil - Partner	Trade value, \$	Net weight, kg	Average price, \$/kg	Country share,%
2010 total including: Dem. Rep. of the Congo France USA				
2011 total including: USA Spain				

Table 10. Export and import of Cobalt metal in Brazil, 2006-2011

	2006	2007	2008	2009	2010	2011
Export, thousand \$						
Export, tons						
Import, thousand \$						
Import, tons						
Trade balance, tons						

Figure 8. Export and import dynamics of Cobalt metal in Brazil in 2006-2011, tons

Figure 9. Trade balance of Cobalt metal in Brazil in 2006-2011, tons



Table 11. Structure of Cobalt metal export by country in Brazil in 2010-2011

Period / Brazil - Partner	Trade value, \$	Net weight, kg	Average price, \$/kg	Country share,%
2010 total including: Japan Belgium Netherlands USA Canada Argentina Other Asia, nes Singapore France Chile				
2011 total including: Belgium USA Netherlands Japan Rep. of Korea China France Argentina Angola Germany				



Table 12. Structure of Cobalt metal import by country in Brazil in 2010-2011

Period / Brazil - Partner	Trade value, \$	Net weight, kg	Average price, \$/kg	Country share,%
2010 total including: Germany Zambia Morocco USA Dem. Rep. of the Congo Congo Netherlands Belgium United Kingdom Japan				
2011 total including: Germany Dem. Rep. of the Congo Morocco USA Zambia Netherlands Japan Belgium Sweden United Kingdom				