



# 2006 Minerals Yearbook

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## NEW CALEDONIA

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# THE MINERAL INDUSTRY OF NEW CALEDONIA

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New Caledonia is rich in mineral resources. The identified mineral resources were chromium, cobalt, copper, gold, iron, manganese, nickel, and silver. New Caledonia's nickel resources reportedly accounted for about 25% of the known nickel resources in the world (Resource Information Unit, 2006, p. 45). New Caledonia was the world's fifth ranked producer of mined nickel after Russia, Canada, Australia, and Indonesia (Kuck, 2007). The territory exported nickel ore principally to Australia and Japan; ferronickel, mostly to the European Union (EU), China, Japan, the Republic of Korea, and Taiwan; and nickel matte, to France.

## Production

In the past 5 years, nickel and cobalt were the two mineral commodities produced in large quantity. Société Le Nickel (SLN) was the leading nickel-cobalt ore producer and the sole producer of ferronickel and nickel matte. Because miners blockaded two of SLN's four open pit mines during the second half of 2006, production of nickel ore decreased by 4.6% to 6.15 million metric tons (Mt), of which 4.17 Mt was saprolite and 1.99 Mt was laterite. Exports of nickel ore decreased by 4.3% to 3.25 Mt. Of the total nickel ore exports, 1.24 Mt was saprolite and 2.01 Mt was laterite (Institut de la Statistique et Études Économique, 2007).

Production of ferronickel and nickel matte was by SLN at its 75,000-metric-ton-per-year (t/yr)-capacity Doniambo smelter, which was located near Noumea. SLN's Doniambo smelter was the world's largest ferronickel plant in 2006. In 2006, the Doniambo smelter's nickel metal production totaled 62,378 metric tons (t), of which 48,723 t was ferronickel (in nickel content) and 13,655 t was nickel matte (in nickel content) (Institut de La Statistique et des Étude Économiques, 2007).

In April 2006, Société Minière du Sud Pacifique (SMSP) reportedly signed an agreement with Pohang Iron and Steel Co. Ltd. (POSCO) of the Republic of Korea to set up a joint venture for nickel mining and refining. Under the agreement, SMSP would establish and operate a nickel mine in New Caledonia and POSCO would invest \$352 million to construct a 30,000-t/yr nickel refinery in the Gwabgyangmen Free Economic Zone starting in 2008. The ore feed for the refinery would be supplied by SMSP's new nickel mine in New Caledonia for a period of 30 years (Platts.com, 2006).

## Structure of the Mineral Industry

In 2006, the mineral industry of New Caledonia comprised seven nickel-cobalt mining companies, a nickel ore-processing company, a cement grinding company, and several foreign companies engaged in exploring and developing nickel-cobalt mines and nickel-cobalt ore processing facilities. The major

nickel-cobalt mining companies were SLN, SMSP, and Société des Mines de la Tontouta (SMT). SLN operated five open pit saprolite (garnierite) nickel mines at the Kouaoua, the Nepoui-Kopeto, the Poro, and the Tiebaghi pits in North Province, and at the Thio open pits in South Province. SMSP operated four limonite (laterite) nickel mines at the Boakine, the Poum, the Poya, and the Quaco deposits in North Province. SMT operated two limonite nickel mines at the Moneo and Nakety deposits in North Province (table 2).

## Outlook

During the past 2 years, investment in the nickel industry was expected to boost the nickel industry's mining and processing capacity by the end of 2008. The proposed major project—Inco Ltd.'s Goro nickel-cobalt project, which was acquired by Companhia Vale do Doce (CVRD) of Brazil in 2006, moved slowly toward the startup date because of opposition from unions, indigenous Kanaks (landowners), and environmental groups despite completion of construction for most mining and processing facilities near the southern tip of South Province. Social and environmental concerns about the Goro nickel project continued to prompt protests by opposition groups in 2006. As a result, the expected increase in New Caledonia's nickel capacity will likely be delayed until the environmental management plans and socioeconomic issues concerning economic benefit for the indigenous Kanaks community are resolved (MiningWatch Canada, 2007).

Xstrata plc of Switzerland, which acquired Falconbridge Ltd.'s Koniambo nickel-cobalt project in 2006, reportedly planned to start construction of the \$2.2 billion nickel mining and processing plant in North Province in 2007 (ECNext Inc., 2007; MiningWatch Canada, 2007).

## References Cited

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- Resource Information Unit, 2006, Register of Indo-Pacific Mining 2006: Subiaco, Australia, Resource Information Unit, 157 p.

TABLE 1  
NEW CALEDONIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2002	2003	2004	2005	2006 <sup>P</sup>
Cement	100,080	100,171	114,762	119,302	125,000 <sup>c</sup>
Nickel:					
Ore:					
Gross weight thousand metric tons	5,944	6,625	7,033	6,444 <sup>r</sup>	6,150
Co content <sup>3</sup>	2,780	2,602	2,726 <sup>r</sup>	1,769 <sup>r</sup>	1,900 <sup>c</sup>
Ni content	99,841	112,013	119,199 <sup>r</sup>	111,939 <sup>r</sup>	105,000 <sup>c</sup>
Ferronickel:					
Gross weight	162,973	167,208	151,296 <sup>r</sup>	172,067 <sup>r</sup>	179,000 <sup>c</sup>
Ni content	48,650	50,666	43,016	46,738	48,723
Nickel matte:					
Gross weight	15,583	15,309	17,200	18,100	19,200 <sup>c</sup>
Ni content	11,217	10,857	12,164	12,838	13,655

<sup>c</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>P</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Table includes data available through May 25, 2007.

<sup>2</sup>In addition to the commodities listed, crude (unspecified) and crushed stone, construction sand, and silica sand for metallurgical use are produced, but available information is inadequate to make reliable estimates of output.

<sup>3</sup>Includes only cobalt contained in mined limonite.

Source: Institute de la Statistique et des Etudes Economique, New Caledonia, Series Statistiques—Mine—Metallurgie 2006. U.S. Geological Survey, Minerals Questionnaire, 2002-05. British Geological Survey, World Mineral Production 2002-05.

TABLE 2  
NEW CALEDONIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>c</sup>
Cement	Société des Ciments de Numbo	Noumea	150
Cobalt, in ore and concentrate, Co content	Société Le Nickel (SLN) (Eramet Group of France, 60%; Société Territoial Caledonian de Participation Industrielle, 30%; Nisshin Steel Co. of Japan, 10%)	Kouaoua, Nepoui-Kopeto, Poro, Tiebaghi, and Thio mining centers	2000
Do.	Société Minière du Sud Pacifique (majority owned by the Northern Province of New Caledonia)	Boakaine, Ouaco, Poum, and Poya mining centers	1,000
Nickel:			
In ore and concentrate, Ni content	Société Le Nickel (SLN)	Kouaoua, Thio, Nepoui-Kopeto, Poro, Tiebaghi, and Thio mining centers	61,500
Do.	Société Minière du Sud Pacifique, including Nickel Mining Corp., and Nouméa Nickel	Baokaine, Ouaco, Kouaoua, Poum, Poya, and Nakety mining centers	35,800
Do.	Société de la Tontouta (Ballande Group)	Moneo and Nakety mining centers	16,000
Do.	Other small nickel mining companies, which include Société Minière George Montanant SA, GEMINI S.A.	Moneo and Naketu-Bogota, and Tontouta mining centers	7,300
In ferronickel, Ni content	Société Métallurgique le Nickel-Société Le Nickel (SLN)	Doniambo, Noumea	60,000
In nickel matte, Ni content	do.	do.	15,000

<sup>c</sup>Estimated.