THE MINERAL INDUSTRY OF NEW CALEDONIA

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In 2004, the mineral industry of the French territory of New Caledonia continued to be dominated by the mining of nickeliferous laterite-saprolite-limonite-garnierite ores and the production of ferronickel and a nickel-cobalt matte. New Caledonia was the world's second ranked producer of ferronickel after Japan and the fifth ranked source of nickel ore after Russia, Canada, Australia, and Indonesia (Jorgenson and others, 2005§¹; Kuck, 2006§).

Société le Nickel (SLN), which was a consortium of the Eramet Group of France (60%), Société Territoriale Caledonian de Participation Industrielle of New Caledonia (30%), and Nisshin Steel Co. of Japan (10%), mined nickel ore from five opencut operations on La Grand Terre, which was the main island of New Caledonia. SLN operated mining centers at Kouaoua, [which was located 140 kilometers (km) northnorthwest of Noumea], Nepoui-Kopeto (250 km northwest of Noumea), Thio (120 km north-northwest of Noumea), and Tiebaghi (320 km northwest of Noumea). In 2004, SLN increased the output capacity at the Tiébaghi Mine. The Société Minière Georges Montagnat ran the contract mining operations at SLN's Etoile du Nord deposit, which was located 280 km northwest of Noumea (Eramet Group, 2005, p. 2; undated c§).

With the installation of a new furnace in June 2004, SLN expanded the nominal capacity of the Doniambo Smelter at Noumea to 75,000 metric tons per year (t/yr). Prior to the expansion, the smelter had a 62,000-t/yr capacity; about 80% of the output of the smelter was ferronickel, which had an average nickel content of 26% to 32%; the remaining smelter production was a nickel-cobalt matte, which contained about 75% nickel. The matte was shipped to Eramet's Le Havre-Sandouville Refinery near La Havre, France (Eramet Group, 2005, p. 2; undated a§, b§).

Other open pit nickel mining operations in New Caledonia included mines at the Boakaine, the Kouaoua, and the Nakety mining centers, which were operated by Société Minière du Sud Pacifique S.A. (Groupe SMSP); the Karembe, the Moneo, and the Nakety mining centers, which were operated by Société des Mines de la Tontouta (SMT); and the Nakety-Bogota mining center, which was operated by Gemini S.A. for SMT. Output from these mines was exported.

In October 2004, Canada's Inco Ltd. announced its decision to develop the Goro nickel-cobalt deposit at the southern tip of La Grand Terre. The operating company, Goro Nickel S.A., expected that production from the Goro Mine would begin in September 2007. The mine was to be designed to produce 60,000 t/yr of nickel and about 5,000 t/yr of cobalt at full capacity. In 2004, Inco held 85% equity interest in Goro Nickel and the Bureau de Recherches Géologiques et Minières (B.R.G.M.) of France held the remaining 15%; negotiations on restructuring Goro Nickel's ownership were underway, however, with the Société de Participation Minière du Sud Caledonien S.A.S., which was a company formed by the three Provinces of New Caledonia, and Sumic Nickel Netherlands (a joint venture of Mitsui & Co., Ltd. and Sumitomo Metal Mining Co., Ltd. of Japan) (Inco Ltd., 2004).

In addition to producing abundant resources of nickel ore, the island territory also produced construction materials from several quarries, and Société des Ciments de Numbo operated a cement plant at Noumea. More-extensive coverage of the mineral industry of New Caledonia can be found in the 2003 U.S. Geological Survey Minerals Yearbook, volume III, Area Reports—International—Asia and the Pacific.

References Cited

- Eramet Group, 2005, 2004 annual results: Paris, France, Eramet Group press release, March 10, 7 p.
- Inco Ltd., 2004, Inco announces decision to proceed with Goro Project: Toronto, Ontario, Canada, Inco Ltd. news release, October 19, 4 p.
- Kuck, P.H., 2006, Nickel: U.S. Geological Survey Mineral Commodity Summaries 2006, p. 116-117.

Internet References Cited

Eramet Group, [undated]a, Doniambo, accessed February 15, 2006, at URL http://www.eramet.fr/us/nickel/sites/doniambo.php.

- Eramet Group, [undated]b, Ferronickel and matte production processes, accessed February 15, 2006, at URL http://www.eramet.fr/us/nickel/sites/ pop_process.html.
- Eramet Group, [undated]c, SLN's mining centres, accessed February 27, 2006, at URL http://www.eramet.fr/us/nickel/sites/generalites.php.
- Jorgenson, J.D., Corathers, L.A., Gambogi, Joseph, Kuck, P.H., Magyar, M.J., and Papp, J.F., 2005, Ferroalloys, *in* Metals and minerals, v. I of U.S. Geological Survey Minerals Yearbook 2004, accessed February 15, 2006, at URL http://minerals.usgs.gov/minerals/pubs/commodity/ferroalloys/ feallmyb04.pdf.

Major Source of Information

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¹References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1 NEW CALEDONIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2000	2001	2002	2003	2004
Cement	90,750 ^r	92,868	100,080	100,171 ^r	114,762 ^p
Cobalt, mine output: ^e					
Co content	1,700 ^r	1,600 ^r	1,400 ^r	1,400 ^r	1,500
Recovered	330 ^r	310 ^r	280 ^r	270 ^r	300
Nickel:					
Ore:					
Gross weight thousand r	netric tons 7,398 ^r	7,220 ^r	5,944 ^r	6,625 ^r	6,980 ^p
Ni content	126,041 ^r	117,734 ^r	99,841 ^r	112,013 ^r	118,279 ^p
Metallurgical products:					
Ferronickel:					
Gross weight	146,000 ^e	153,012 ^r	162,973 ^r	167,208 ^r	143,000 ^e
Metal content (nickel plus cobalt)	43,914	45,912	48,650	50,666 ^r	43,016
Nickel matte:					
Gross weight	18,700 ^{r, e}	17,586 ^r	15,583 ^r	15,309 ^r	16,800 ^e
Metal content (nickel plus cobalt)	13,549	13,061	11,217	10,857 ^r	12,164

^eEstimated; estimated data are rounded to no more than three significant digits. ^PPreliminary. ^rRevised.

¹Table includes data available through October 2005.

²In addition to the commodities listed, crude (unspecified) and crushed stone, construction sand, and silica sand for metallurgical use are produced, but data are insufficient to make reliable estimates of quantities.