THE MINERAL INDUSTRY OF

NEW CALEDONIA

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The mineral industry in the French Territory of New Caledonia and Dependencies continues to be dominated by the mining of nickeliferous laterite-saprolite ore; production of ferronickel of various commercial grades; and of matte containing 75% nickel at the 63,000-metric-ton-per-year (t/yr) capacity Doniambo smelter in Nouméa, the territorial capital. New Caledonia is the fourth largest producer of mined nickel after Russia, Canada, and Australia and the biggest producer of ferronickel (World Metal Statistics, 1999). Nickel is the mainstay of the territory's economy, accounting for an estimated 7% to 10% of its gross domestic product and about 80% of total exports. Construction materials are produced in New Caledonia from several quarries, and Société des Ciments de Numbo operates a cement plant at Nouméa.

Société Métallurgique le Nickel (SLN), a 90%-owned subsidiary of Metropolitan France's Eramet S.A., with Japan's Nisshin Steel Co. owning the remaining 10%, mines nickel ore from several operations on La Grande Terre, the main island of New Caledonia. Included in the operations are the two mining centers of Kouaoua and Thio on the east coast, the two mining centers of Kaala-Gomen and Népoui-Kopéto on the west coast, and the contractor-operated mines managed by Société Minière Georges Montagnat S.A. at the Karembe and Tontouta mining centers on the west coast. Remaining mine production is from smaller, independent operators owned by indigenous New Caledonians, or Kanaks, including JC Berton Mines, Nickel Mining Corp., Société des Mines de la Tontouta, and the La Société Minière du Sud Pacifique S.A. (SMSP), with open pit mines at Boakaine, Karembe, Kouaoua, Moeno, Nakety, Ouaco, and Tontouta.

SLN's nickel ore production is concentrated and used primarily as feed at the Doniambo smelter for the production of ferronickel ingots and matte, with minor amounts of concentrate exported to Australia and Japan. Most of the ferronickel production is shipped to consumers in Australia and Japan, and all matte production is shipped to Eramet's refinery at Sandouville, near Le Havre in northern France, for further processing into high-purity electrolytic nickel and nickel salts (Mining Journal, 1998). Minor amounts of cobalt also are recovered as a component of the matte during refining at Sanouville. Mine output from the independently operated mines is mainly for export to QNI Ltd.'s Yabulu nickel refinery near Townsville, Queensland; Japanese nickel smelters and refiners, including Pacific Metals Industry Co. Ltd. at Hachinohe, Aomori Prefecture; and the Glenbrook ferronickel smelter near Riddle, Oregon. Some of the independently produced output also is used to feed the Doniambo smelter.

In April, Canada's nickel giant, Falconbridge Ltd., announced the signing of a definitive joint-venture agreement with the Kanak-owned SMSP and its controlling shareholder Société de Financement et d'Investissement de la Province Nord to participate in the proposed development and construction of a 54,000-t/yr nickel-in-ferronickel plant in the North Province of New Caledonia. SMSP had signed a protocol with the French Government, Eramet, and others earlier in the year regarding the exchange of nickel mining assets in New Caledonia. Under the protocol, SMSP was to gain access to the Koniambo nickel deposit in exchange for its Poum deposit. The next phase in advancing the project was to be the formation of a joint-venture company, with Falconbridge holding a 49% minority and SMSP holding a 51% majority. Falconbridge was to contribute about $50 million for exploration work, metallurgical work, and a feasibility study, whereas SMSP was to contribute the nickel-cobalt laterite deposit. The partnership's goal, after several years proving viability, was to construct a $1 billion plant capable of producing 54,000 t/yr of nickel-in-ferronickel (Northern Miner, 1998).

Late in the year, Inco Ltd. of Canada announced it would proceed with construction of a $50-million, 12-metric-ton-per-day integrated pilot plant for the testing of new laterite processing technology at its 85%-owned Goro lateritic nickel-cobalt project, about 80 kilometers north of Nouméa (Islands Business, 1998). The pilot plant was to be completed in 1999, enabling Inco to be in a position by 2000 to decide on building a commercial plant with an anticipated initial capacity of 27,000 t/yr of low-cost nickel and 2,700 t/yr of cobalt, with potential for doubling that capacity (Inco Ltd., 1997). France's Bureau de Recherches Géologiques et Minières owned the remaining 15% interest in the Goro project.

References Cited

Inco Ltd., 1997, Annual report: Inco Ltd., p. 32.

Islands Business, 1998, Business briefing—New Caledonia: Islands Business, v. 24, no. 11, November, p. 29.

Mining Journal, 1998, Nickel: Supplement to Mining Journal, v. 331, no. 8491, July 31, p. 11.

Northern Miner, 1998, Falco, Inco rivals in New Caledonia: Northern Miner, v. 84, no. 10, p. 1.

World Metal Statistics, 1999, Nickel: World Metal Statistics, v. 52, no. 2, February, p. 103, 114.

Major Source of Information

Le Service des Mines et L'Energie
Nouméa, New Caledonia

TABLE 1
NEW CALEDONIA: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity 2/		1994	1995	1996	1997	1998 e/
Cement e/		90,000	100,000	100,000	100,000	100,000
Cobalt, mine output: e/						
Co content		6,000	6,000	6,000	6,500 r/	6,500
Recovered		800	800	800	800	800
Nickel:						
Ore:						
Gross weight	thousand tons	5,729	7,087 r/	7,240 r/	8,145 r/	7,750
Ni content		97,323	119,905 r/	122,486 r/	136,467 r/	129,200
Metallurgical products:						
Ferronickel:						
Gross weight e/		157,952	168,800	169,000	172,250 r/	177,200
Metal content (nickel plus cobalt)		39,488	42,200	42,200	44,312 r/	44,300
Nickel matte:						
Gross weight e/		19,400	18,500	16,800	18,900 r/	21,600
Metal content (nickel plus cobalt)		10,641	10,143	9,850	10,580 r/	12,100

e/ Estimated. r/ Revised.

1/ Table includes data available through April 14, 1999.

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