

THE MINERAL INDUSTRY OF NEW CALEDONIA

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The mineral industry in the French Territory of New Caledonia and Dependencies continued to be dominated by the mining of nickeliferous laterite-saprolite ore. The ore was used for the subsequent production of ferronickel of various commercial grades and of matte containing 75% nickel at the Doniambo smelter at Nouméa, the capital. Minor amounts of cobalt were recovered as a component of nickel matte exports from refining operations at Sandouville, near Le Havre, in northern France. Minor amounts of pit and quarry construction materials also were produced.

New Caledonia was the largest producer of ferronickel in the world and the fourth largest producer of mined nickel after Canada, Indonesia, and Russia. Nickel mining and smelting was the territory's most important resource, accounting for 25% of the gross domestic product and 80% of exports.²

Nickel was produced at mines owned by Société Métallurgique le Nickel (SLN), a 90%-owned subsidiary of Metropolitan France's Eramet, with Japan's Nisshin Steel Co. owning the remaining 10%, as well as from smaller, independent producers. SLN's production of nickel ore was from 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 at contractor-operated mines operated by Société Georges Montagnat at the Karembe and Tontouta mining centers on the west coast, all on the main island of La Grande Terre. Remaining production was from smaller, independent operators, including Berton, Groupe Pentacost, Société des Mines de la Toutouta, and Société Minière du Sud Pacifique, with open pit mines at Boakaine, Karembe, Kouaoua, Moeno, Nakety, Ouaco, and Tontouta.

Mine output from the independently operated mines was mainly for export to Australia's Yabulu nickel refinery near Townsville, Queensland; Japanese nickel smelters and refiners; and the Glenbrook ferronickel smelter near Riddle, Oregon; some also was used as feed for the Doniambo smelter. SLN's nickel ore primarily was used as feed for its Doniambo smelter at Nouméa for the production of ferronickel ingots and shot and nickel matte, with minor amounts exported to Japan. Most of the ferronickel production was shipped to consumers in Australia and Japan, and all production of nickel matte was shipped to Eramet's refinery at Sandouville-Le Havre for further processing into high-purity electrolytic nickel and nickel salts.³

The US\$150-million Kopéto 2 opencut mine was inaugurated in May 1994 at SLN's Népoui-Kopéto mining center, 250 kilometers (km) northwest of Nouméa. Kopéto 2, touted as one of the world's most technically advanced mines, previously was

in operation during the 1970's.⁴ Output at the 10-square kilometer mine was to increase progressively by 1996 to produce 830,000 metric tons (mt) per year of nickel ore for the production of 17,000 mt of nickel, supplying about one-third of the requirements of the Doniambo smelter for 15 years.⁵

Near yearend 1994, Eramet reached agreement with the French Government-controlled Bureau de Recherches Géologiques et Minières (BRGM) for the acquisition of BRGM's Cofremmi subsidiary in exchange for a 2.4% equity stake in Eramet. Eramet's acquisition was to provide its SLN subsidiary access to an estimated 800,000 mt of nickel reserves held by Cofremmi in New Caledonia.⁶ The agreement also corroborated Eramet's plans announced in September 1994 to gradually increase from 50,000 mt to 60,000 mt the annual production capacity at SLN's Doniambo smelter.⁷

Reportedly, total proven and probable nickel reserves in New Caledonia were 1 million metric tons (Mmt) of contained nickel in ore grading greater than 2.7% nickel, with an additional 1 Mmt of contained nickel in ore grading 2.5% to 2.7% nickel.⁸

In addition to abundant reserves of nickel ores, the island territory is well endowed with other mineral resources. Significant prospects have been reported for antimony, copper, gold, iron ore, lead-zinc, manganese, and phosphate rock. However, none of these has been mined commercially.

The transportation infrastructure includes 6,340 km of roads, of which only about 10% is paved, with the remaining improved earth. There are 28 airports serving the country, 4 with permanent-surface runways. International shipping ports include the port at the capital city of Nouméa and the ports at Népoui, Poro, and Thio. Electricity generating capacity was 400 megawatts, or about 2.2 million megawatt hours per year total production.⁹

¹Text prepared July 1995.

²Mining Journal (London). V. 323, No. 8291, Sept. 2, 1994, p. 173.

³Eramet. 1994 Annual Report. 30 pp.

⁴Pacific Islands Monthly (Suva, Fiji). V. 64, No. 8, Aug. 1994, p. 43.

⁵Engineering and Mining Journal (Chicago). V. 195, No. 8, Aug. 1994, p. 16.

⁶Mining Journal (London). V. 323, No. 8307, Dec. 23-30, 1994, p. 454.

⁷South Sea Digest (Sydney). V. 14, No. 17, Nov. 4, 1994, p. 3.

⁸Mining Annual Review 1995. South Pacific Islands. Mining Journal (London), in press.

⁹U.S. Central Intelligence Agency, Washington, DC. The World Factbook 1994, p. 285.

Major Source of Information

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

Annales des Mines (Paris). Productions et Exportations
Minières & Métallurgiques de la Nouvelle Calédonie,
monthly.

Major Publications

Service de la Statistique (Paris). Annuaire Statistique,
annual.

TABLE 1
NEW CALEDONIA: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Metric tons unless otherwise specified)

Commodity	1990	1991	1992	1993 e/	1994 e/
Cement	65,000 e/	89,700	90,400	90,000	90,000
Chromite, gross weight	6,220	--	8,170 r/	--	--
Cobalt, mine output: e/					
Co content	6,000	6,000	6,000	6,000	6,000
Recovered	800	800	800	800	800
Nickel:					
Ore:					
Gross weight	4,490	5,690	5,650	5,600 3/	5,660 3/
Ni content	85,100	114,000	113,000	97,100 r/ 3/	96,000 3/
Metallurgical products:					
Ferronickel:					
Gross weight e/	127,000	138,000	126,000	146,000	156,000
Metal content (nickel plus cobalt)	32,300	34,400	31,900	36,900	39,500 3/
Nickel matte:					
Gross weight e/	13,000	12,200	10,100	19,800	19,400
Metal content (nickel plus cobalt)	9,680	9,040	7,480	10,900	10,600 3/
Stone: e/					
Crude (unspecified)	25,000	25,000	25,000	25,000	25,000
Crushed	125,000	125,000	125,000	125,000	125,000
Sand: e/					
Construction	100,000	100,000	100,000	100,000	100,000
Silica (for metallurgical use)	20,000	20,000	20,000	20,000	20,000

e/ Estimated. r/ Revised. XX Not Applicable.

1/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits.

2/ Table includes data available through July 7, 1995.

3/ Reported figure.