

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 were the territory's most important resource, accounting for an estimated 25% of the gross domestic product and 80% of exports.

Remaining stocks of chromite concentrate produced at the Tiebaghi Mine continued to be exported. The Tiebaghi Mine, owned and operated by Chromical S.A. in the northern part of the island, was permanently closed in 1992.

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 Karembé 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, Karembé, 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.

Inco Ltd. of Canada announced in midyear that it will conduct a detailed study to determine the economic feasibility of developing its Goro nickel project on the southeastern coast of the main island. The study was expected to be completed by yearend 1996 and will be based on pressure acid leaching combined with solvent extraction, which has been successfully researched at Inco's Toronto laboratory using nickel laterites from the Goro deposit. The study was to be sponsored by Goro Nickel SA, a company 85% owned by Inco and 15% by the French Government-controlled Bureau de Recherches Géologiques et Minières. The Goro project includes extensive deposits of nickeliferous laterites with identified reserves of 165 million metric tons (Mt) grading 1.6% nickel and 0.16% cobalt capable of supporting long-term nickel mining.

Reportedly, total proven and probable nickel reserves in New Caledonia were 1 Mt of contained nickel in ore grading greater than 2.7% nickel, with an additional 1 Mt of contained nickel in ore grading 2.5% to 2.7% nickel. These were considered sufficient for at least 40 years of mining at current rates.

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.

¹Text prepared Apr. 1996.

Major Source of Information

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

Major Publications

Service de la Statistique (Paris). *Annuaire Statistique*, annual.
Annales des Mines (Paris). *Productions et Exportations
Minières & Métallurgiques de la Nouvelle Calédonie*,
monthly.

TABLE 1
NEW CALEDONIA: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity		1991	1992	1993	1994	1995
Cement		89,739	90,417	90,000 e/	90,000 e/	100,000 e/
Chromite, gross weight		--	8,169	--	--	--
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	thousand tons	5,690	5,650	5,599	5,729 r/	7,068
Ni content		114,492	113,000	97,092	97,323 r/	121,457
Metallurgical products:						
Ferronickel:						
Gross weight e/		137,600	125,900	145,500	156,100	166,700
Metal content (nickel plus cobalt)		34,411	31,895	36,850	39,488	42,200
Nickel matte:						
Gross weight e/		12,200	10,100	19,800	19,400	18,500
Metal content (nickel plus cobalt)		9,041	7,475	10,883	10,641	10,143
Stone: e/						
Crude (unspecified)	cubic meters	25,000	25,000	25,000	25,000	25,000
Crushed	do.	125,000	125,000	125,000	125,000	125,000
Sand: e/						
Construction	do.	100,000	100,000	100,000	100,000	100,000
Silica (for metallurgical use)	do.	20,000	20,000	20,000	20,000	20,000

e/ Estimated. r/ Revised.

1/ Table includes data available through Apr. 2, 1996.