



2019 Minerals Yearbook

NEW CALEDONIA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF NEW CALEDONIA

By Spencer D. Buteyn

New Caledonia, an overseas territory of France, is located in the Pacific Ocean east of Australia. New Caledonia's mineral industry was characterized by nickel-cobalt mining and the production of ferronickel and other nickel metallurgical products. In 2019, New Caledonia ranked fourth in global mined nickel production, accounting for 8% of the world's production. Approximately one-third of the surface area of the country's main island, Grande Terre, is covered by peridotites. Supergene alteration of these peridotites, caused by extensive tropical weathering, produced widespread nickel-cobalt laterite deposits. Mining of these deposits remained significant to New Caledonia's economy (Direction de l'Industrie, des Mines et de l'Énergie de la Nouvelle-Calédonie, 2009, 2020a; Marsh and others, 2013, p. 3, 10; Institut d'Émission d'Outre-mer, 2020, p. 10; McRae, 2020).

Minerals in the National Economy

In 2018 (the latest year for which data were available), the real gross domestic product (GDP) of New Caledonia increased by 0.6%. The nickel industry accounted for 7% of New Caledonia's nominal GDP in 2018, which was an estimated 1.03 trillion CFP francs (XPF)¹ (\$9.86 billion). In 2019, the total value of New Caledonia's exports decreased by 8.5% to XPF178.3 billion (\$1.71 billion); of these exports, 94% were related to the country's mineral industry. The value of ferronickel exports accounted for 58% of total exports, followed by nickel ores and concentrates, 23%; nickel oxide, 12%; nickel hydroxide cake, 5%; and cobalt carbonate, 2%. The extractive industries employed an average of 1,737 people in 2019, which was an increase of 0.8% from the number employed by the extractive industries in 2018, and the manufacturing sector employed an average of 10,819 people, which was an increase of 2.8% (Comptes Économiques Rapides pour l'Outre-Mer, 2019; Institut d'Émission d'Outre-mer, 2020, p. 110; Institut de la Statistique et des Études Économiques Nouvelle-Calédonie, 2020b).

Production

In 2019, New Caledonia's ferronickel (gross weight) production decreased by 4.8% from that in 2018 to 247,746 metric tons (t) and the nickel content decreased by 14% to 70,654 t. Production of nickel ore (gross weight) decreased by 7.8% to 15.3 million metric tons (Mt), and the nickel content decreased by 3.1% to 209,549 t. Production of oxide sinter (Ni content) decreased by 33% in 2019 compared with that in 2018, and production of nickel hydroxide cake (Ni content) decreased by 4%. Cobalt recovered from nickel mining in 2019 decreased by 19% to an estimated 1,700 t. Cement production decreased by 11% (table 1).

¹Where necessary, values have been converted from CFP francs (XPF) to U.S. dollars (US\$) at the annual average exchange rate of XPF104.244=US\$1.00 in 2018.

Structure of the Mineral Industry

The Directeur de l'Industrie, des Mines et de l'Énergie de la Nouvelle-Calédonie [New Caledonian Department of Industry, Mines, and Energy] (DIMENC) is the Government agency responsible for the development of the energy and mineral industries. Within the DIMENC, Le Service des Mines et Carrières [the Mines and Quarries Service] regulates mineral industry activities, including exploration, mining, and environmental protection. The Mining Code of New Caledonia, established in 2009, provides incentives for the conversion of ore to metals within New Caledonia. The Mines and Quarries Service grants exploration permits and concessions. Exploration permits cover one or more contiguous 100-hectare squares, are valid for 3 years, and are renewable twice. Mining concessions are granted to exploration permit holders only after they are able to demonstrate the existence of a minable deposit. The maximum initial term of a concession is 50 years, and the license is renewable every 25 years. Operators under mining concessions are organized into three categories: companies that simultaneously operate domestic refineries; small miners; and subcontractors operating on the behalf of mine owners. The right to export minerals to foreign metallurgical companies is granted only by decree of the Government following a review by the Mines and Quarries Service (Australia Trade and Investment Commission, 2018; Direction de l'Industrie, des Mines et de l'Énergie de Nouvelle-Calédonie, 2020d; Institut d'Émission d'Outre-mer, 2020, p. 104–105).

Société Le Nickel (SLN) was jointly owned by Eramet S.A. of France (56%), Société Territoriale Calédonienne de Participation Industrielle (STCPI)—which was jointly owned by the Governments of the Province Iles, Province Nord, and Province Sud—(34%), and Nisshin Steel Co. of Japan (10%). SLN produced ferronickel at the pyrometallurgical Doniambo plant in Province Sud. The Doniambo plant was supplied with nickel concentrate from four nickel-cobalt laterite mines owned and operated by SLN. The company reported that the Doniambo plant produced ferronickel with a nickel content of between 22% and 27%. SLN owned seven other mines that were operated by contractors. Koniambo Nickel SAS (KNS) was jointly owned by Société Minière du Sud Pacifique (SMSP; 51%) and Glencore plc of Switzerland (49%). KNS operated the Koniambo pyrometallurgical plant in Province Nord, which produced ferronickel from ores supplied by the company's Koniambo nickel mine. KNS reported that the Koniambo plant produced ferronickel with a nickel content of 35%. Nickel Mining Company SAS (NMC), which was a joint venture between SMSP (51%) and POSCO of the Republic of Korea (49%), operated four nickel mines in New Caledonia. (table 2; Eramet S.A., 2020b; Institut d'Émission d'Outre-mer, 2020, p. 105).

SMSP was owned by the Government of Province Nord through Société de Financement et d'Investissement de la Province Nord

[Financial Investment in the North Province Corp.] (SOFINOR; 87%) and the Government of Province Iles through the Société de Développement et d'Investissement de la Province des Iles Loyauté [Development and Investment in the Loyalty Islands Province Corp.] (SODIL; 5%). Ore produced by NMC was exported to the Republic of Korea for processing by the Gwangyang pyrometallurgical plant operated by Société du Nickel de Nouvelle-Calédonie et Corée (SNNC), which was jointly owned by SMSP (51%) and POSCO (49%). Vale New Caledonia SAS (VNC) was owned by Vale S.A. of Brazil (95%) and the Société de Participation Minière du Sud Calédonien SAS (SPMSC; 5%). SPMSC was jointly owned by the governments of Province Iles, Province Nord, and Province Sud. VNC operated the Goro hydrometallurgical plant, which produced nickel oxide and nickel hydroxide cake and recovered cobalt as a byproduct. Ore was supplied to the Goro plant by VNC's Goro nickel-cobalt mine (table 2; Institut de la Statistique et des Études Économiques Nouvelle-Calédonie, 2020a; Koniambo Nickel SAS, 2020; Société Minière du Sud Pacifique S.A., 2020; Vale S.A., 2020, p. 13, 57).

Commodity Review

Metals

Nickel and Cobalt.—New Caledonia's nickel-cobalt laterite deposits were categorized into the following two main subtypes: a lower saprolite layer composed of weathering silicate minerals, and an overlying limonite (also known as yellow laterite) layer composed of goethite. Limonite deposits in New Caledonia were reported to have an average grade of nearly 1.5% nickel, whereas the average grades of saprolite deposits ranged from 1.8% to 2.4% nickel. In 2019, saprolites accounted for 82.2% of the nickel ore mined in the country, by gross weight, and limonite accounted for the remaining 17.8%. In 2019, limonite production decreased significantly, by 40%, compared with that in 2018, whereas saprolite production increased by 4% (Marsh and others, 2013, p. 1, 17; Direction de l'Industrie, des Mines et de l'Énergie de Nouvelle-Calédonie, 2020e; Institut d'Émission d'Outre-mer, 2020, p. 103).

The gross weight of laterite exported in 2019 increased by 7.0% to 7.2 Mt. The Republic of Korea remained the leading destination for New Caledonia's laterite exports, by volume, accounting for 3.1 Mt (a 4.9% decrease compared with that in 2018), followed by Japan, 2.1 Mt (a 7.6% increase), and China, 2.0 Mt (a 32% increase). The nickel content of exported ores to the Republic of Korea averaged 1.5% in 2019; to Japan, 1.4%; and to China, 1.3%. All nickel ore and concentrate exported to the Republic of Korea was produced by NMC and sold to SNNC to produce ferronickel at SNNC's Gwangyang plant. SLN accounted for 37% of the nickel ore and concentrate exports to Japan; Société des Mines de la Tontouta (SMT), 30%; Société Minière Georges Montagnat S.A. (SMGM), 24%; and VNC, 10%. SLN accounted for 40% of the nickel ore and concentrate exports to China; SMT, 37%; NMC, 20%; and SMGM, 3% (Direction de l'Industrie, des Mines et de l'Énergie de Nouvelle-Calédonie, 2020c; Institut d'Émission d'Outre-mer, 2020, p. 104–105, 107).

New Caledonia exported 244,828 t of ferronickel (gross weight), which was a decrease of 9% compared with that in 2018; 20,710 t of nickel oxide (gross weight), which was a decrease of 39%; and 2,977 t of cobalt carbonate (gross weight), which was a decrease of 36%. The nickel hydroxide cake exports (gross weight) totaled 35,783 t, which was an increase of 9%. China was the leading destination for nickel metallurgical exports in terms of total nickel content of all exported nickel metallurgical products, accounting for 71%. Countries within the European Union accounted for 11% of these exports, and the United States accounted for 3% (Direction de l'Industrie, des Mines et de l'Énergie de Nouvelle-Calédonie, 2020b; Institut d'Émission d'Outre-mer, 2020, p. 109).

The increase in laterite exports was driven by the new export rights granted to domestic mining companies during the year. The Government granted these rights to allow the companies to export low-grade ore stored onsite that could not be processed by domestic facilities. In April, the Government granted SLN the right to export up to 4 Mt of laterite ore annually for a period of 10 years. The company exported 1.6 Mt in 2019 and expected to export 2.5 Mt in 2020. Prior to this decision, SLN exported only 910,000 t of laterite ore in 2017 and 1.2 Mt in 2018. SLN reported that the new license allowed the company to mine deposits in which the ore was too low-grade for use at its Doniambo plant. Also, in 2019, the Government granted NMC the right to export 460,000 t of laterite to China annually. This followed the signing by NMC's parent company SMSP of a memorandum of agreement with Yangzhou Yichuan Nickel Industry Co. Ltd. of China in 2018. The agreement provided SMSP with the option to acquire a 51% interest in the Yangzhou ferronickel plant in China in exchange for supplying the plant annually with 600,000 t of nickel ore at an average grade of 1.6% nickel from the mines owned and operated by NMC. The Yangzhou plant had the capacity to produce 50,000 metric tons per year (t/yr) of ferronickel (Société Minière du Sud Pacifique S.A., 2018; Thomson Reuters, 2019; Eramet S.A., 2020a, p. 29–30; Institut d'Émission d'Outre-mer, 2020, p. 106).

SLN produced 4.7 Mt of laterite in 2019, which was an increase of 15% compared with that in 2018. Production increased despite strikes and roadblocks during the first half of the year that affected three of the four mines owned and operated by SLN. The strikes concerned changes to working hours that SLN had implemented at its mines with the goal of improving efficiency. SLN attributed the increase in production to these changes in working hours, which were implemented in mid-May. These strikes did negatively affect ferronickel production at the Doniambo plant, however, which decreased by 13% to 47,000 t (nickel content) (RNZ Pacific, 2019a; Eramet S.A., 2020c, p. 56).

In 2019, KNS produced 23,700 t of ferronickel (nickel content)—a decrease of 16% compared with that in 2018—at its Koniambo plant. The company attributed this decrease to stoppages owing to required maintenance. These stoppages affected the production in the first half of 2019; production in the first half of the year was 10,200 t, whereas production in the second half was 13,500 t. The company expected to reach production of 30,000 t of nickel in ferronickel in 2020

(Glencore plc, 2020, p. 71; Institut d’Emission d’Outre-mer, 2020, p. 109–111).

In 2019, VNC produced 23,400 t of nickel contained in finished products at its Goro plant, which was a 28% decrease compared with the amount produced in 2018. VNC also recovered cobalt as a byproduct and produced 1,703 t of cobalt in intermediate products, which was a decrease of 19%. The plant was supplied by the Goro Mine, which produced 2.5 Mt of ore at a grade of 1.54% nickel in 2019 compared with 2.6 Mt at a grade of 1.46% nickel in 2018. These decreases were in response to decreased global nickel prices. In April, Vale announced that VNC would halt production of nickel oxide in 2020. In December, Vale announced that VNC would no longer recover cobalt at its facility and would produce only nickel hydroxide, and that it was seeking to sell its 95% share in the Goro plant and mine. Vale was also seeking permission from the Government to export 2 Mt of laterite ore annually (RNZ Pacific, 2019c, d; Institut d’Emission d’Outre-mer, 2020, p. 108; Vale S.A., 2020, p. 59–60, 65)

Outlook

The GDP of New Caledonia is expected to decrease by between 2.9% and 4.5% in 2020 owing to uncertainty related to the coronavirus disease 2019 (COVID-19) pandemic. After the production of ferronickel (Ni content) and nickel ore (Ni content) reached an all-time high in 2018, production of each decreased for the first time in more than 5 years in 2019. The decrease in production was owing to decreased nickel prices, as well as required maintenance at the Koniambo plant and social issues. New Caledonia’s three metallurgical plants—Doniambo, Goro, and Koniambo—all had lower levels of production compared with that in 2018. Both the Doniambo and the Goro plants were operated at a loss in 2019. Owing to decreased nickel prices, both SLN and VNC are moving away from processing ore into intermediate and finished metallurgical products and instead focusing on exporting nickel-cobalt laterites. The Government of New Caledonia has granted exporting rights to KNS and SLN, and VNC requested similar exporting rights at the end of 2019. The granting of expanded export rights to KNS, SLN, and VNC will likely result in the continued decrease in the production of metallurgical products and an increase in the production of nickel ore, as mining companies focus on producing and exporting ores to supply the growing demand for nickel in China rather than supplying domestic plants. The average nickel content of ore produced is expected to decrease because the mining companies will be able to mine lower grade deposits and export lower grade ore that cannot be processed by domestic plants. No nickel oxide sinter production is expected in 2020, and the amount of recovered cobalt is likely to decrease following Vale’s announcement that VNC would be focusing only on nickel hydroxide cake production in 2020. Nickel mining is expected to remain central to the New Caledonia economy, however, although the production of nickel metallurgical products in coming years will depend on nickel prices and on future Government decisions regarding the granting of more export rights (RNZ Pacific, 2019b, d; Institut d’Emission d’Outre-mer, 2020, p. 12, 108–110).

References Cited

- Australia Trade and Investment Commission, 2018, Mining to New Caledonia: Canberra, Australian Capital Territory, Australia, Australian Trade and Investment Commission. (Accessed June 12, 2018, at <https://www.austrade.gov.au/australian/export/export-markets/countries/new-caledonia/industries/mining-to-new-caledonia>.)
- Comptes Économiques Rapides pour l’Outre-Mer, 2019, Les comptes économiques rapides de la Nouvelle-Calédonie en 2018 [New Caledonia’s rapid economic accounts in 2018]: Paris, France, Comptes Économiques Rapides pour l’Outre-Mer, 4 p. (Accessed June 29, 2020, at <https://www.cerom-outremer.fr/IMG/pdf/cerom-comptes-rapides-2018.pdf>.)
- Direction de l’Industrie, des Mines et de l’Énergie de la Nouvelle-Calédonie, 2009, Geological map of New Caledonia—First edition: Noumea, New Caledonia, Direction de l’Industrie, des Mines et de l’Énergie de la Nouvelle-Calédonie, 2 p. (Accessed June 30, 2020, at https://dimenc.gouv.nc/sites/default/files/documents/2009_Geologie_NC_500k.pdf.)
- Direction de l’Industrie, des Mines et de l’Énergie de Nouvelle-Calédonie, 2020a, Carte des centres miniers en Nouvelle-Calédonie [Map of mining centers in New Caledonia]: Noumea, New Caledonia, Direction de l’Industrie, des Mines et de l’Énergie, 1 p. (Accessed June 29, 2020, at https://dimenc.gouv.nc/sites/default/files/download/nc_centres_miniers_2018.pdf.)
- Direction de l’Industrie, des Mines et de l’Énergie de Nouvelle-Calédonie, 2020b, Exportations métallurgiques [Metallurgical exports]: Noumea, New Caledonia, Direction de l’Industrie, des Mines et de l’Énergie, 1 p. (Accessed July 20, 2020, at https://dimenc.gouv.nc/sites/default/files/export_metal_juin20.xlsx.)
- Direction de l’Industrie, des Mines et de l’Énergie de Nouvelle-Calédonie, 2020c, Exportations minières [Mineral exports]: Noumea, New Caledonia, Direction de l’Industrie, des Mines et de l’Énergie, 1 p. (Accessed May 12, 2020, at https://dimenc.gouv.nc/sites/default/files/export_mine_mars_2019_0.xlsx.)
- Direction de l’Industrie, des Mines et de l’Énergie de Nouvelle-Calédonie, 2020d, Les mines [The mines]: Noumea, New Caledonia, Direction de l’Industrie, des Mines et de l’Énergie, 3 p. (Accessed June 6, 2020, at https://web.archive.org/web/2016*/https://dimenc.gouv.nc/mines-et-carrieres/les-mines.)
- Direction de l’Industrie, des Mines et de l’Énergie de Nouvelle-Calédonie, 2020e, Productions minières [Mining production]: Noumea, New Caledonia, Direction de l’Industrie, des Mines et de l’Énergie, 1 p. (Accessed May 12, 2020, at https://dimenc.gouv.nc/sites/default/files/prod_mine_juin20.xlsx.)
- Eramet S.A., 2020a, 2019 results: Paris, France, Eramet S.A., 64 p. (Accessed July 15, 2020, at https://www.eramet.com/sites/default/files/2020-02/Eramet-2019-Full-Year-Results-Presentation-20200220_0.pdf.)
- Eramet S.A., 2020b, A long-standing player in nickel: Paris, France, Eramet S.A. (Accessed June 30, 2020, at <https://www.eramet.com/en/sln>.)
- Eramet S.A., 2020c, Universal registration document: Paris, France, Eramet S.A., 426 p. (Accessed July 15, 2020, at <https://www.eramet.com/sites/default/files/2020-04/Eramet-2019-Universal-Registration-Document.pdf>.)
- Glencore plc, 2020, Annual report 2019: Baar, Switzerland, Glencore plc, 250 p. (Accessed June 12, 2020, at <https://www.glencore.com/dam:jcr/79fd3300-ee50-4ee1-870d-6372274c71b5/glen-2019-annual-report-interactive.pdf>.)
- Institut de la Statistique et des Études Économiques Nouvelle-Calédonie, 2020a, Mine-metallurgie conjoncture 4e trimestre [Mine-metallurgy business cycle 4th quarter]: Noumea, New Caledonia, Institut de la Statistique et des Études Économique, 2 p. (Accessed July 2, 2020, at <https://www.isee.nc/component/phocadownload/category/322-analyse?download=1946:point-economique-mine-metallurgie-tableau-de-bord-4e-trimestre-2019>.)
- Institut de la Statistique et des Études Économiques Nouvelle-Calédonie, 2020b, Synthèse annuelle 2019 - Emploi salarié [Annual summary 2019—Salaried employment]: Noumea, New Caledonia, Institut de la Statistique et des Études Économique, 4 p. (Accessed July 2, 2020, at <https://www.isee.nc/component/phocadownload/category/143-bilan-economique-et-social?download=1963:synthese-annuelle-2019-emploi-salarie>.)
- Institut d’Emission d’Outre-mer, 2020, Nouvelle-Calédonie rapport annuel 2019 [New Caledonia annual report 2019]: Paris, France, Institut d’Emission d’Outre-mer, 208 p. (Accessed July 29, 2020, at https://www.ieom.fr/IMG/pdf/ra2019_nouvelle-caledonie_publication.pdf.)
- Koniambo Nickel SAS, 2020, Our nickel: Koné, New Caledonia, Koniambo Nickel SAS. (Accessed June 30, 2020, at <http://www.koniambonickel.nc/article/our-expertise/our-nickel-c71cb?ln=En>.)

Marsh, E., Anderson, E., and Gray, F. 2013, Nickel-cobalt laterites—A deposit model, chap. H of Mineral deposit models for resource assessment: U.S. Geological Survey Scientific Investigations Report 2010–5070–H, 38 p. (Accessed June 30, 2020, at <https://pubs.usgs.gov/sir/2010/5070/h/pdf/SIR10-5070-H.pdf>.)

McRae, M.E., 2020, Nickel: U.S. Geological Survey Mineral Commodity Summaries 2020, p. 112–113.

RNZ Pacific, 2019a, New Caledonian union agrees for SLN workers to return: Radio New Zealand Pacific, February 28. (Accessed July 22, 2020, at <https://www.rnz.co.nz/international/pacific-news/383607/new-caledonian-union-agrees-for-sln-workers-to-return>.)

RNZ Pacific, 2019b, New Caledonia's SLN warned of collapse: Radio New Zealand Pacific, April 5. (Accessed July 22, 2020, at <https://www.rnz.co.nz/international/pacific-news/386384/new-caledonia-s-sln-warned-of-collapse>.)

RNZ Pacific, 2019c, Vale puts its New Caledonia nickel stake up for sale: Radio New Zealand Pacific, December 5. (Accessed July 22, 2020, at <https://www.rnz.co.nz/international/programmes/datelinepacific/audio/2018725443/vale-puts-its-new-caledonia-nickel-stake-up-for-sale>.)

RNZ Pacific, 2019d, Vale puts New Caledonian nickel plant up for sale: Radio New Zealand Pacific, December 4. (Accessed July 22, 2020, at <https://www.rnz.co.nz/international/pacific-news/404803/vale-puts-new-caledonian-nickel-plant-up-for-sale>.)

Société Minière du Sud Pacifique S.A., 2018, President Paul Néaoutyine visits China: Noumea, New Caledonia, Société Minière Du Sud Pacifique S.A., July 30. (Accessed July 20, 2020, at <https://smsp.nc/en/president-paul-neaoutyine-visits-china/>.)

Société Minière du Sud Pacifique S.A., 2020, The shareholding: Noumea, New Caledonia, Société Minière du Sud Pacifique S.A. (Accessed June 30, 2020, at <https://smsp.nc/en/the-shareholding/>.)

Thomson Reuters, 2019, UPDATE 1—Eramet gets go-ahead to boost New Caledonia nickel exports, shares rise: Thomson Reuters, April 16. (Accessed July 20, 2020, at <https://www.reuters.com/article/eramet-nickel/update-1-eramet-gets-go-ahead-to-boost-new-caledonia-nickel-exports-shares-rise-idUSL5N21Y18R>.)

Vale S.A., 2020, Form 20–F—2019: Rio de Janeiro, Brazil, Vale S.A., 201 p. (Accessed June 30, 2020, at http://www.vale.com/EN/investors/information-market/annual-reports/20f/20FDocs/Vale%2020-F%202019_i.pdf.)

TABLE 1
NEW CALEDONIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons, gross weight, unless otherwise specified)

Commodity ²	2015	2016	2017	2018	2019	
METALS						
Cobalt, mine production, nickel ore, Co content: ^c	19,300	20,400	21,500	21,600	21,000	
Of which, recoverable ³	3,640	3,390	2,780	2,100	1,700	
Ferroalloys, ferronickel:						
Gross weight	228,484	261,420	269,961	260,206	247,746	
Ni content	56,486	67,518	73,219	82,114	70,654	
Nickel:						
Mine, ore:						
Gross weight	thousand metric tons	14,786	15,429	16,552	16,634	15,331
Ni content		193,199	204,207	215,382	216,225	209,549
Intermediate:						
Matte:						
Gross weight		9,978	6,333	--	--	--
Ni content		6,761	4,287	--	--	--
Nickel hydroxide cake, Ni content		9,686	7,269	6,525	6,723	6,483
Oxide sinter, Ni content		21,044	28,465	30,875	25,800	17,267
INDUSTRIAL MINERALS						
Cement, hydraulic		112,041	111,654	104,253	86,343	76,953

^cEstimated. -- Zero.

¹Table includes data available through June 22, 2020. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, crushed stone, iron, silica, and silica sand may have been produced, but available information was inadequate to make reliable estimates of output.

³Cobalt contained in the following materials: cobalt chloride produced in France from New Caledonian matte, cobalt carbonate and nickel hydroxide produced in New Caledonia, and lateritic nickel ore exported to Australia.

TABLE 2
NEW CALEDONIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Metric tons)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement	Tokuyama Nouvelle Calédonie S.A. (Tokuyama Corp., 74.6%, and others 25.4%)	Grinding plant in Noumea, Province Nord	180,000
Cobalt, in ore and concentrate, Co content	Société Le Nickel (SLN) [Eramet S.A., 56%; Société Territoriale Calédonienne de Participation Industrielle (STCPI), 34%; Nisshin Steel Co., 10%]	Kouaoua, Nepoui-Kopeto, and Tiebaghi mining centers, Province Nord, and Thio mining center, Province Sud	3,000 ^e
Do.	do.	Boualoudjelima, Etoile du Nord, Poro Bonini, Poro Francaise, and Poum mining centers in Province Nord, and Dothio and Opou mining centers in Province Sud ¹	NA
Do.	Vale New Caledonia SAS (VNC) (Vale S.A., 95%, and Société de Participation Minière du Sud Calédonien SAS, 5%)	Goro complex, 58 kilometers east of Noumea in Province Sud	4,500 ^e
Nickel:			
Ferronickel, Ni content	Koniambo Nickel SAS (KNS) (Société Minière du Sud Pacifique (SMSP), 51%, and Glencore plc, 49%)	Koniambo plant in Province Nord	50,000
Do.	Société Le Nickel (SLN) [Eramet S.A., 56%; Société Territoriale Calédonienne de Participation Industrielle (STCPI), 34%; Nisshin Steel Co., 10%]	Doniambo industrial site in Noumea, Province Sud	60,000 ^e
Nickel hydroxide cake, Ni content	Vale New Caledonia SAS (VNC) (Vale S.A., 95%, and Société de Participation Minière du Sud Calédonien SAS, 5%)	Goro complex, 58 kilometers east of Noumea in Province Sud	NA
Nickel matte, Ni content	Société Le Nickel (SLN) [Eramet S.A., 56%; Société Territoriale Calédonienne de Participation Industrielle (STCPI), 34%; Nisshin Steel Co., 10%]	Doniambo Industrial site, Noumea, Province Sud ²	15,000 ^e
Nickel oxide, Ni content	Vale New Caledonia SAS (VNC) (Vale S.A., 95%, and Société de Participation Minière du Sud Calédonien SAS, 5%)	Goro complex, 58 kilometers east of Noumea in Province Sud	57,000
Ore and concentrate, Ni content	Koniambo Nickel SAS (KNS) [Société Minière du Sud Pacifique (SMSP), 51%, and Glencore plc, 49%]	Koniambo mining center in Province Nord	36,000 ^e
Do.	Nickel Mining Co. SAS (NMC) [Société Minière du Sud Pacifique (SMSP), 51%, and POSCO, 49%]	Nakety, Ouaco, and Kouaoua mining centers in Province Nord, and Boakaine and Poya mining centers in Province Sud ³	31,000 ^e
Do.	Société des Mines de la Tontouta (SMT)	Bogota, Cap Bocage, Kaala, and Nakety mining centers in Province Nord	15,000 ^e
Do.	Société Le Nickel (SLN) [Eramet S.A., 56%; Société Territoriale Calédonienne de Participation Industrielle (STCPI), 34%; Nisshin Steel Co., 10%]	Kouaoua, Nepoui-Kopeto, and Tiebaghi mining centers, Province Nord, and Thio mining center, Province Sud	87,000 ^e
Do.	do.	Boualoudjelima, Etoile du Nord, Poro Bonini, Poro Francaise, and Poum mining centers in Province Nord, and Dothio and Opou mining centers in Province Sud ¹	28,000 ^e
Do.	Société Minière Georges Montagnat S.A. (SMGM)	Tontouta mining center in Province Sud	1,000 ^e
Do.	Vale New Caledonia SAS (VNC) (Vale S.A., 95%, and La Société de Participation Minière du Sud Calédonien SAS, 5%)	Goro, 58 kilometers east of Noumea in Province Sud	65,000 ^e

^eEstimated. Do., do. Ditto. NA Not available.

¹Operated through contractors on the behalf of Société Le Nickel (SLN).

²Production of nickel matte was suspended at the Doniambo industrial site in 2016.

³The Boakaine mining center remained closed in 2019.