

## NEW CALEDONIA

*By a Special Contributor*

**N**ew Caledonia is located in the southwest Pacific Ocean, and comprises three regions. Grande Terre Island is divided into Northern and Southern Provinces, and the remaining region holds the Loyalty Islands of Ouvea, Lifou and Mare. The country is a French Territory, although a referendum that was held in 1998 may lead to increased autonomy. A further referendum on full autonomy from France is scheduled by 2018.

New Caledonia is the world's fourth-largest producer of mined nickel and the largest producer of ferro-nickel, and nickel products dominate the economy. Nickel is produced from laterites which have higher nickel grades than those in Australia where lateritic nickel mining has presented numerous problems over the past few years. The main producer in New Caledonia is Société Le Nickel (SLN), a 60%-owned subsidiary of the French group Eramet. The remaining interests in SLN are held by STCPI (30%), a company representing the interests of the indigenous Kanaks, and Nisshin Steel of Japan (10%).

SLN operates four open-pit mines, and a fifth is operated by a subcontractor. In addition to its mines, SLN operates the Doniambo ferro-nickel smelter at Nouméa, which processes about 3 Mt/y of nickel ore from the Thio, Kouaoua, Tiébaghi and Népoui-Kopeto pits, and from the Etoile du Nord operated by Soc. Georges Montagnat. The Doniambo smelter produces 80% of its 62,000 t/y capacity as ferro-nickel (making it the largest ferro-nickel producer in the world) and the remaining 20% as nickel matte (75% Ni) for refining at Eramet's plants in France. The smelter's capacity is to be expanded to 75,000 t/y by 2006 at an estimated cost of US\$180 million. The facility produced 59,867 t of nickel (in ferronickel and matte) in 2002.

New Caledonia's second major nickel producer is Soc. Minière du Sud Pacific (SMSP), majority-owned by the Northern Province. It operates five limonitic nickel mines and the ore is delivered to the Yabulu smelter in Australia, operated by BHP Billiton. SMSP was the recipient of the Koniambo nickel deposit in an asset swap instigated by the New Caledonian Government in 1997, and is now in a joint venture (JV) with Falconbridge Ltd concerning the development of Koniambo. The JV plans to construct a 60,000 t/y nickel-in-ferronickel mining and smelter complex smelter in the north of Grande Terre, which would rely on Koniambo ore as its main source of feed. Early in 2002, the JV secured a 15-year 100% tax holiday, plus a further, five-year 50% tax holiday for the project from the New Caledonian authorities. A prefeasibility study was completed in 2002, and is under review. A programme of delineation drilling to outline more resources was completed during the first half of 2003. A 'bankable' feasibility study was begun during 2003 (originally scheduled for completion during 2003), and a development decision is expected late in 2004. Koniambo is estimated to contain measured and indicated resources of 121 Mt at an average grade of 2.15% Ni, using a 1.5%

Ni cut-off grade, and additional, inferred, resources of 190 Mt at 2.1% Ni, using the same cut-off. Falconbridge, which holds an option to earn a 49% interest in the project, regards Koniambo as its "most significant growth opportunity".

Inco Ltd holds 85% of the Goro lateritic nickel project in Southern Province in joint venture with France's Bureau de Recherches Géologiques et Minières (15%). Following a detailed feasibility study completed in March 1997 and involving SNC Lavalin and two other engineering firms, the partners spent some US\$50 million on constructing a 12 t/d integrated pilot plant and engineering work related to proprietary hydrometallurgical and solvent-extraction technology. In April 2001, Inco announced that the trials had been successful and that a full-scale nickel-cobalt plant would be constructed at a cost of US\$1.4 billion. However, Inco began a review of the project in late 2003 (which may delay production until at least 2006) to evaluate other, cheaper options for the planned operation. In March 2001, Inco raised US\$200 million in a bond issue as part of the necessary financing but is seeking a suitable partner to share the cost. Sumitomo Metal Mining Co. announced in May 2002 that it had been in negotiations with Inco concerning participation in Goro for the past three years.

Goro is currently designed with an annual capacity of 54,000 t nickel and 5,400 t cobalt, with the end products being nickel oxide (78% Ni) and cobalt carbonate. The authorities have also granted Goro a 15-year, 100% tax holiday, followed by a five-year, 50% tax holiday. Goro has total resources of 370 Mt averaging 1.6% Ni and 0.17% Co, including proven and probable reserves of 47 Mt.

Inco was granted a preliminary exploration permit for the Prony lateritic nickel deposit by the Southern Province authorities in May 2002. Late in 2002, the indigenous Kanak people, local suppliers and contractors held demonstrations, suspending the work in progress at Goro while Inco addressed the situation. The issues included concern on the part of the Kanaks over potential increased production at Goro as a result of the Prony licence award, thus potentially threatening the development of the Koniambo project, which is located in an area populated mainly by Kanaks.

In October 2001, Perth-based Argosy Minerals Inc. finalised an agreement with Norilsk Mining Co. and Soc. Mines de la Tontouta (SMT) concerning a tripartite venture for the US\$800 million development of the Nakety-Bogota lateritic nickel project. However, Norilsk withdrew from the agreement in August 2002, and Argosy's interest also ceased at the same time.

Future minerals legislation in New Caledonia is under review, as part of the process of devolvement of power from the French authorities to the New Caledonian Government. The Congress of New Caledonia is expected to have to prepare and adopt new mineral legislation, which will be effected by the adoption of other parliamentary or regulatory laws to be issued within the same transitional period. Mining investors and operators should expect significant changes in the overall framework for mining, in addition to new

laws directly concerning the mining industry that have already been passed by the New Caledonia Congress.