touches with many other scientific and technical disciplines. The United Nations is providing us with an excellent opportunity through its International Years to promote a wide range of causes and topics.

Global Experiments is an exciting new tool thanks to which millions of young students from all around the world can be reached and connected. We can all learn from previous experiences about how to build successful and effective Global Experiments to engage with the new generations of scientists and inspire new scientific vocations.

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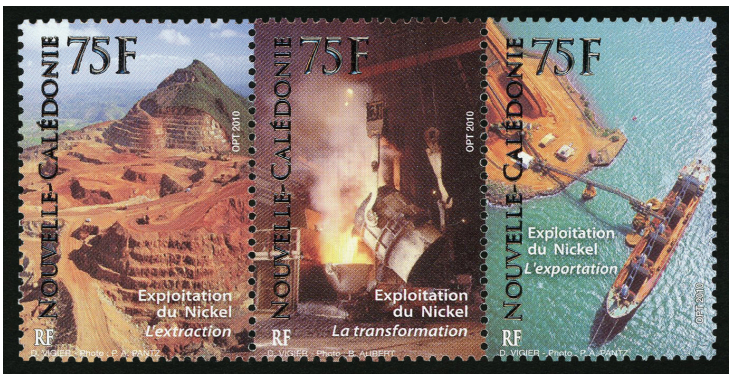
Nickel Mining in Paradise

New Caledonia, an overseas territory of France located approximately 1400 km east of Australia, has what most people would expect from a rather secluded archipelago in the southwestern Pacific Ocean, including a fascinating biodiversity and a mixed population of Melanesian and European descent. Discovered by the celebrated British navigator and explorer James Cook in 1774, the main island, Grande Terre, is surrounded by coral reefs and consists primarily of coastal plains, lush mountains, and valleys. A rich array of flora and fauna, beautiful beaches, a myriad of waterfalls and hiking trails, moderate weather, and a unique blend of indigenous and French cultures make it an appealing tourist destination.

However, it may come as a surprise to many that New Caledonia, which is only half the size of Taiwan and has a population of roughly a quarter of a million, is one of the world's top producers of nickel, together with Australia, Canada, Indonesia, Russia, Brazil, and the Philippines. The French engineer Jules Garnier first encountered green deposits of nickel-containing minerals in New Caledonia in 1864, and commercial mining operations in the main island began in 1875. The export of nickel ores and ferronickel alloys is today a major driver of the economy in New Caledonia, which boasts some 10-15% of the world reserves of the versatile metal.

The stamp triptych featured in this note was issued in 2010 to highlight the three key steps involved in the production of nickel in New Caledonia, namely the mining of mineral ores, the smelting process, and the transfer of the ensuing silvery-white metal for export. Nickel, often in combination with chromium or small quantities of other transition metals, is extensively used in electroplating applications and in the manufacture of stainless steel and a variety of nonferrous alloys, leading to the material's enhanced strength and corrosion resistance. Significant quantities of nickel are also used in rechargeable batteries and catalytic hydrogenation reactions. With world production and consumption of nickel on the rise, renewed efforts are made in New Caledonia and elsewhere to minimize the adverse environmental impact of mining and processing of nickel ores. Interestingly, "nickel" (five-cent) coins in the United States, in circulation since 1866, contain only 25% of the metal, the balance being actually copper!



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