Flash Economics

N° 49
May 15th, 2026

The energy transition will give rise to a new form of colonialism

When global production relied primarily on fossil fuels, access to oil and natural gas was of strategic importance to countries. This had prompted countries without oil or natural gas reserves to forge closer ties with those that did, hence Europe's links with Russia and the countries of the Middle East.

The energy transition and the needs of the digital and space industries will mean that access to critical materials (nickel, graphite, titanium, phosphorus, cobalt, magnesium, lithium, copper, rare earths, etc..) will become strategic. This could lead to the re-emergence of a new form of colonialism, with the major powers (the United States, Russia, China) seeking to control a number of countries that possess abundant reserves of these critical minerals.

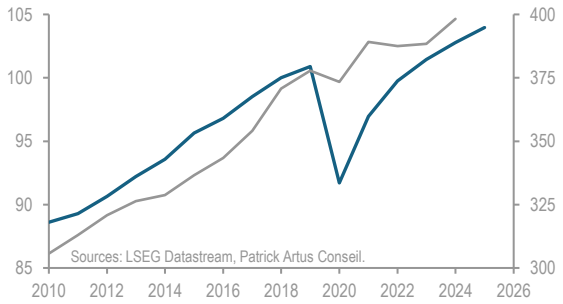
Patrick Artus
Senior Economic Advisor
patrick.artus-ext@ossiam.com
@PatrickArtus
Patrick Artus

Marketing communication: this document is a marketing presentation. It has not been prepared in accordance with legal requirements designed to promote the independence of investment research; and it is not subject to any prohibition on dealing ahead of the dissemination of investment research.

International relations relating to dependence on fossil fuels

The world is emerging from a period in which the consumption of fossil fuels (Chart 1) was essential to growth.

Chart 1
World: Oil and natural gas consumption



This situation had prompted oil and natural gas-consuming countries to forge closer ties with oil and natural gas-producing countries, hence Europe's dependence on Russian gas (Table 1), and the historical links forged between the United States and Europe on the one hand, and Saudi Arabia, the United Arab Emirates and Qatar on the other.

Table 1: Volume of gas imported by the EU in billion cubic metres

Pays	2021	2023	2025
Russia	150.2	42.9	36.0
United States	18.9	56.3	75.6
Norway	79.5	87.8	89.3
North Africa	44.1	41.0	36.7
Others	41.5	61.9	51.1

Source: European Commission.

The energy transition and the development of artificial intelligence are changing our reliance on natural resources

The energy transition and the development of artificial intelligence mean that access to a number of minerals and rare earth elements has become a strategic priority (Box 1).

Box 1: Critical strategic materials for the European Union

Materials with high economic importance and at risk of supply disruptions in the context of the critical materials			
Antimony	Copper	Lithium	Scandium
Arsenic	Feldspar	Magnesium	Silicon metal
Bauxite / Alumina / Aluminium	Fluorspar	Manganese	Strontium
Baryte	Gallium	Graphite	Tantalum
Beryllium	Germanium	Nickel (battery grade)	Titanium metal
Bismuth	Hafnium	Niobium	Tungsten
Boron	Helium	Phosphate rock	Vanadium
Cobalt	Heavy REE	Phosphorus	
Coking coal	Light REE	Platinum group metals	

Source : European Commission

Producers of critical (strategic) metals and rare earth elements differ significantly from oil and natural gas producers. **The largest producers of rare earth elements are China**, which holds a dominant position in production and an even stronger one in rare earth refining, and, to a lesser extent, the United States, Australia and Myanmar (**Table 2**).

Table 2: Rare earths mine production (metric tons)

Country	2024	2025
China	270 000	270 000
United States	45 500	51 000
Australia	29 000	29 000
Burma	27 000	22 000
Thailand	2 100	4 800
India	2 900	2 900
Madagascar	1 400	2 700
Russia	2 600	2 600
Brazil	560	2 000
Nigeria	1 500	1 500
Other	1 000	550
Vietnam	300	150
Malaysia	140	110
World total (rounded)	**380 000**	**390 000**

Source: U.S. Geological Survey

As regards **the most important materials**, the largest producers of **nickel** are Indonesia, the Philippines, Russia, Canada, France (New Caledonia), China, Brazil and Australia (**Table 3**).

Table 3: Nickel mine production (metric tons)

Country	2024	2025
Indonesia	2 310 000	2 600 000
Other countries	308 000	290 000
Philippines	354 000	270 000
Russia	205 000	200 000
Canada	125 000	140 000
New Caledonia	116 000	140 000
China	115 000	120 000
Brazil	67 500	70 000
Australia	98 000	45 000
United States	7 490	10 000
World total (rounded)	**3 710 000**	**3 900 000**

Source: U.S. Geological Survey

The leading lithium producers are Australia, China and Chile (Table 4).

Table 4: Lithium mine production (metric tons)

Country	2024	2025
Australia	82 700	92 000
China	41 400	62 000
Chile	48 900	56 000
Zimbabwe	20 000	28 000
Argentina	13 800	23 000
Brazil	10 200	12 000
Mali	770	9 400
Canada	4 820	5 600
Portugal	380	380
World total (rounded)	**8 222 000**	**8 290 000**

Source: U.S. Geological Survey

Copper production is dominated by Chile, the Democratic Republic of the Congo, Peru, China, Russia, the United States, Zambia, Australia and Indonesia (Table 5).

Table 5: Copper mine production (thousand metric tons)

Country	Mine production		Refinery production	
	2024	2025	2024	2025
Chile	5 510	5 300	1 940	1 700
Congo (Kinshasa)	2 990	3 200	2 560	2 800
Other countries	2 850	3 000	2 310	2 100
Peru	2 740	2 700	385	340
China	1 840	1 800	12 400	14 000
Russia	1 020	1 300	896	950
United States	1 050	1 000	921	850
Zambia	823	940	189	270
Australia	765	730	434	460
Indonesia	1 010	710	349	400
Kazakhstan	724	710	498	500
Mexico	717	690	489	480
Canada	515	500	324	320
Poland	400	410	589	560
India	27	23	545	620
Japan	—	—	1 570	1 400
Germany	—	—	597	610
Korea, Republic of	—	—	604	610
World total (rounded)	**23 000**	**23 000**	**27 600**	**29 000**

Source: U.S. Geological Survey

The main producers of **cobalt** are the Democratic Republic of the Congo, Indonesia, Russia, Madagascar, Australia and the Philippines (Table 6).

Table 6: Cobalt mine production (metric tons)

Country	2024	2025
Congo (Kinshasa)	226 000	230 000
Indonesia	35 000	44 000
Other countries	7 780	9 100
Russia	8 000	7 700
Madagascar	3 100	3 900
Australia	4 780	3 700
Philippines	3 100	3 700
Canada	3 350	3 500
Papua New Guinea	2 630	2 800
China	2 000	2 000
Cuba	3 450	2 000
Turkey	2 200	1 900
United States	200	300
World total (rounded)	**302 000**	**310 000**

Source: U.S. Geological Survey

Graphite is produced mainly by China, Madagascar, Tanzania, Brazil and Mozambique (Table 7).

Table 7: Graphite mine production (metric tons)

Country	2024	2025
China	1 270 000	1 400 000
Madagascar	85 000	80 000
Tanzania	27 000	75 000
Brazil	58 000	65 000
Mozambique	39 000	60 000
Russia	20 000	25 000
India	17 600	17 000
Canada	11 700	8 000
Korea, North	8 100	8 000
Norway	5 340	6 600
Sri Lanka	3 000	3 200
Turkey	2 600	2 200
Ukraine	900	800
Mexico	706	740
Korea, Republic of	1 000	500
Vietnam	500	500
Austria	100	200
Germany	140	140
World total (rounded)	**1 550 000**	**1 800 000**

Source: U.S. Geological Survey

Dependence on rare earths and strategic minerals means:

- **China plays a significant role**;
- **The need to maintain good relations** with Myanmar, Australia, Chile, the Democratic Republic of the Congo and Indonesia.

Summary: the risk of a new form of colonialism

The energy transition and the construction of data centres linked to the development of artificial intelligence will create a very significant demand for minerals and rare earths. This demand can only be met by the production of a handful of countries in which reserves of these strategic resources are abundant. These countries are not the same as those that produce oil and natural gas, which will lead to a transformation in international relations.

In some cases (Australia, Chile), there will be cooperation between the producing countries and the consumer countries of these strategic minerals. In other cases (Indonesia, Myanmar, China), consumer countries will have to accept the political regimes of the producing countries. In yet other cases (the Democratic Republic of the Congo and other African countries), there may be a return to a form of colonial relationship established by China or Russia.

Finally, exploration for the production of strategic minerals in Greenland, at the poles and on the ocean floor also reveals a colonial temptation, for example on the part of the United States.

Disclaimer

Ossiam, a subsidiary of Natixis Investment Managers, is a French asset manager authorized by the Autorité des Marchés Financiers (Agreement No. GP-10000016). Although information contained herein is from sources believed to be reliable, Ossiam makes no representation or warranty regarding the accuracy of any information of which it is not the source. The information presented in this document is based on market data at a given moment and may change from time to time. This material has been prepared solely for informational purposes only and it is not intended to be and should not be considered as an offer, or a solicitation of an offer, or an invitation or a personal recommendation to buy or sell participating shares in any Ossiam Fund, or any security or financial instrument, or to participate in any investment strategy, directly or indirectly. It is intended for use only by those recipients to whom it is made directly available by Ossiam. Ossiam will not treat recipients of this material as its clients by virtue of their receiving this material. All performance information set forth herein is based on historical data and, in some cases, hypothetical data, and may reflect certain assumptions with respect to fees, expenses, taxes, capital charges, allocations and other factors that affect the computation of the returns. Past performance does not predict future returns. Any opinions expressed herein are statements of our judgment on this date and are subject to change without notice. Ossiam assume no fiduciary responsibility or liability for any consequences, financial or otherwise, arising from, an investment in any security or financial instrument described herein or in any other security, or from the implementation of any investment strategy. This information contained herein is not intended for distribution to, or use by, any person or entity in any country or jurisdiction where to do so would be contrary to law or regulation or which would subject Ossiam to any registration requirements in these jurisdictions. This material may not be distributed, published, or reproduced, in whole or in part.