

Minerals – Backbone of the economy

Major developments in global mining production based on World Mining Data 2022

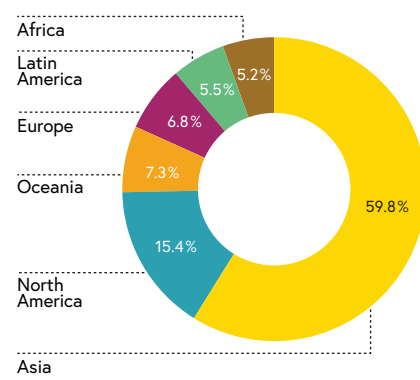
World mining production

2020
17.2 Billion metric tons

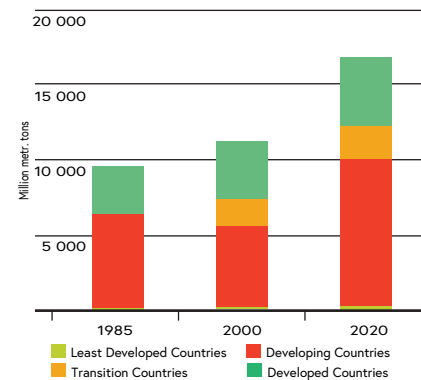
2000
11.3 Billion metric tons

1985
9.6 Billion metric tons

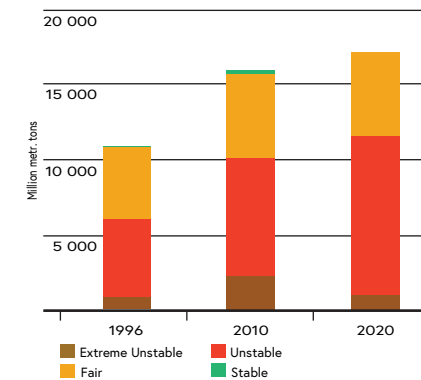
Total production 2020 by continents



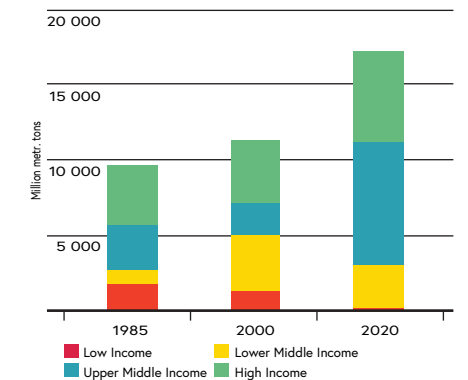
Development status of producer countries



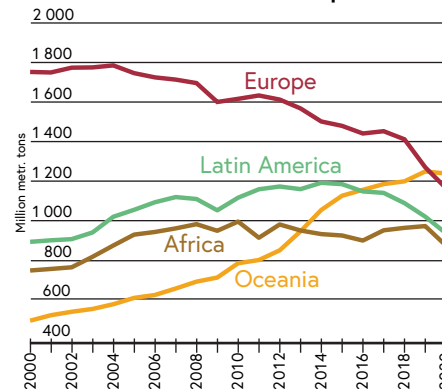
Political stability of producer countries



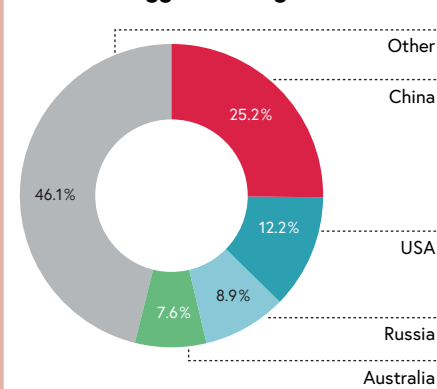
Per capita income in USD – Mineral production contributes to wealth



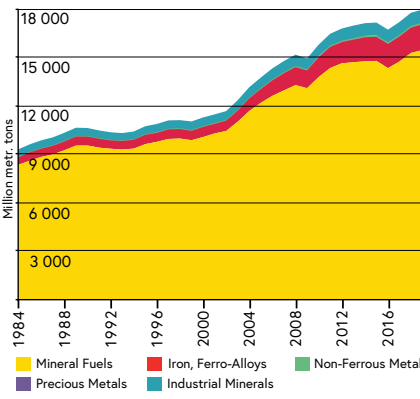
Minerals production: Oceania surpassed Latin America in 2016 and Europe in 2020



China, USA, Russia and Australia are the 4 biggest mining nations



Total mining production 1984 – 2020



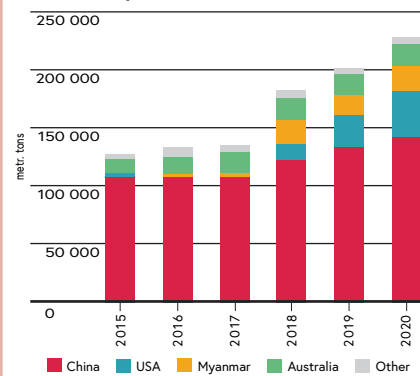
Non-Ferrous Metals

Ratio of 4 base metals Al, Cu, Zn, Pb to all other Non-Ferrous Metals
99.1% to 0.9%

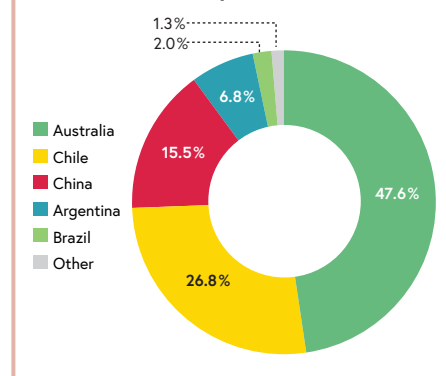
Growth rate of Non-Ferrous Metals production 2000/2020 (2016/2020)
108.8% (7.8%)

Growth rate of Aluminium production 2000/2020 (2016/2020)
165.6% (11.7%)

Strong increase in Rare Earth Minerals production (REO-Content)



Largest 5 producer countries share 98.7% of Lithium production



Iron and Ferro-Alloy Metals

Ratio of Iron Ore to all other Ferro-Alloy Metals
97.3% to 2.7%

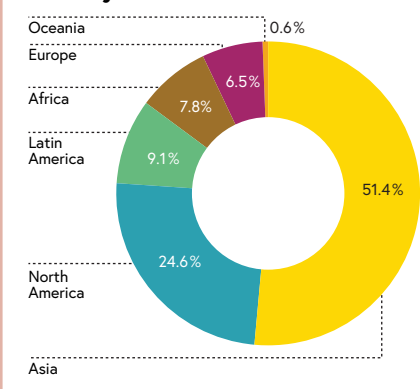
Growth rate of Iron Ore production 2000/2020 (2016/2020)
151.3% (3.8%)

Growth rate of Chromium production 2000/2020 (2016/2020)
87.7% (-6.7%)

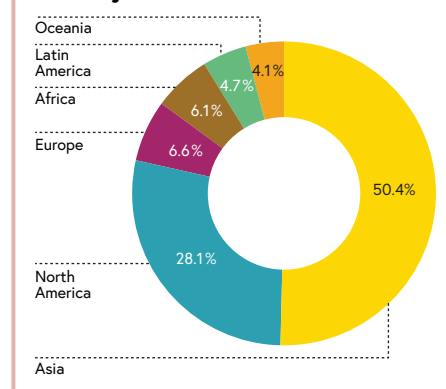
Big changes

	Δ 2000/2020	Δ 2016/2020
Lithium	582.2%	122.1%
Gallium	484.6%	56.7%
Rare Earths	176.2%	73.5%
Uranium	35.4%	-24.6%
Rhenium	34.0%	-25.0%
Mercury	60.0%	-44.1%

Total production of Petroleum 2020 by continents



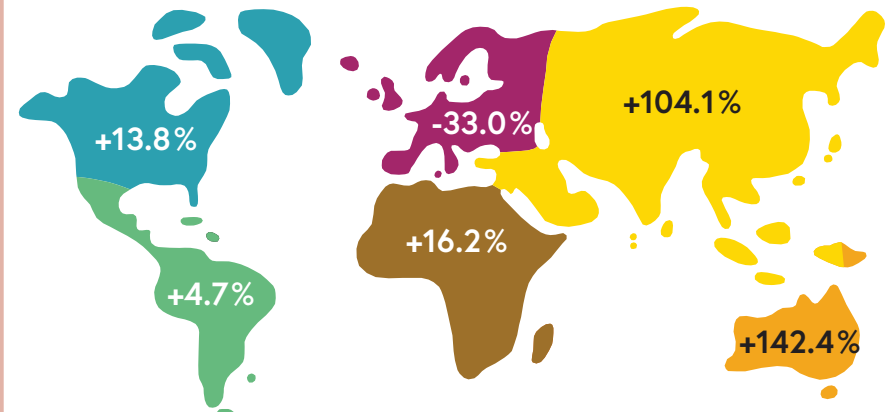
Total production of Natural Gas 2020 by continents



China is world's largest producer of 31 different commodities:

- 4 Iron and Ferro-Alloy Metals: Mo, Ti, W, V
- 15 Non-Ferrous Metals: Al, Sb, As, Bi, Cd, Ga, Ge, In, Pb, Hg, REE, Se, Te, Sn, Zn
- 1 Precious Metal: Au
- 9 Industrial Minerals: Bentonite, Fluorspar, Graphite, Gypsum, Magnesite, Phosphates, Salt, Sulfur, Talc
- 2 Mineral Fuels: Steam Coal, Coking Coal

Δ 2000/2020 - declining production rates since 2000 only in Europe



Mineral Fuels: Political stability of producer countries 2020

