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Message from the President

EURACOAL Executive Meeting – June, Warsaw

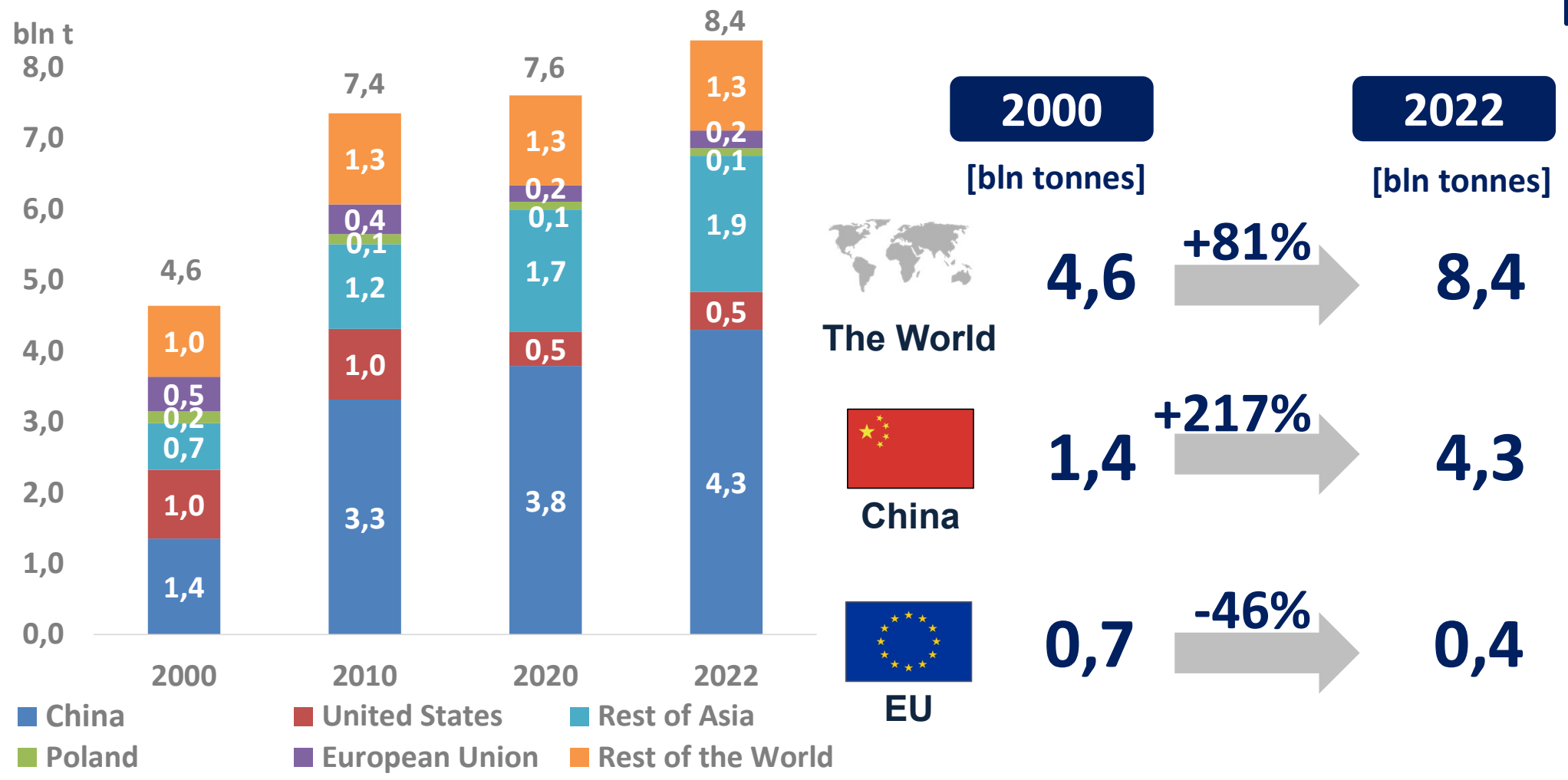
Tomasz Rogala PhD

Chairman of the Management Board
of Polish Mining Group,
EURACOAL President



Warsaw, June 2023

World coal production



There is an increase in coal production, mainly in China and other Asian countries. Coal is used mainly for the production of electricity, which is to a small extent burdened with the costs of CO₂ emissions.

EU ETS (European Union Emissions Trading System)



CO₂ emission costs are around 10 times higher than in Asian Countries

2023:



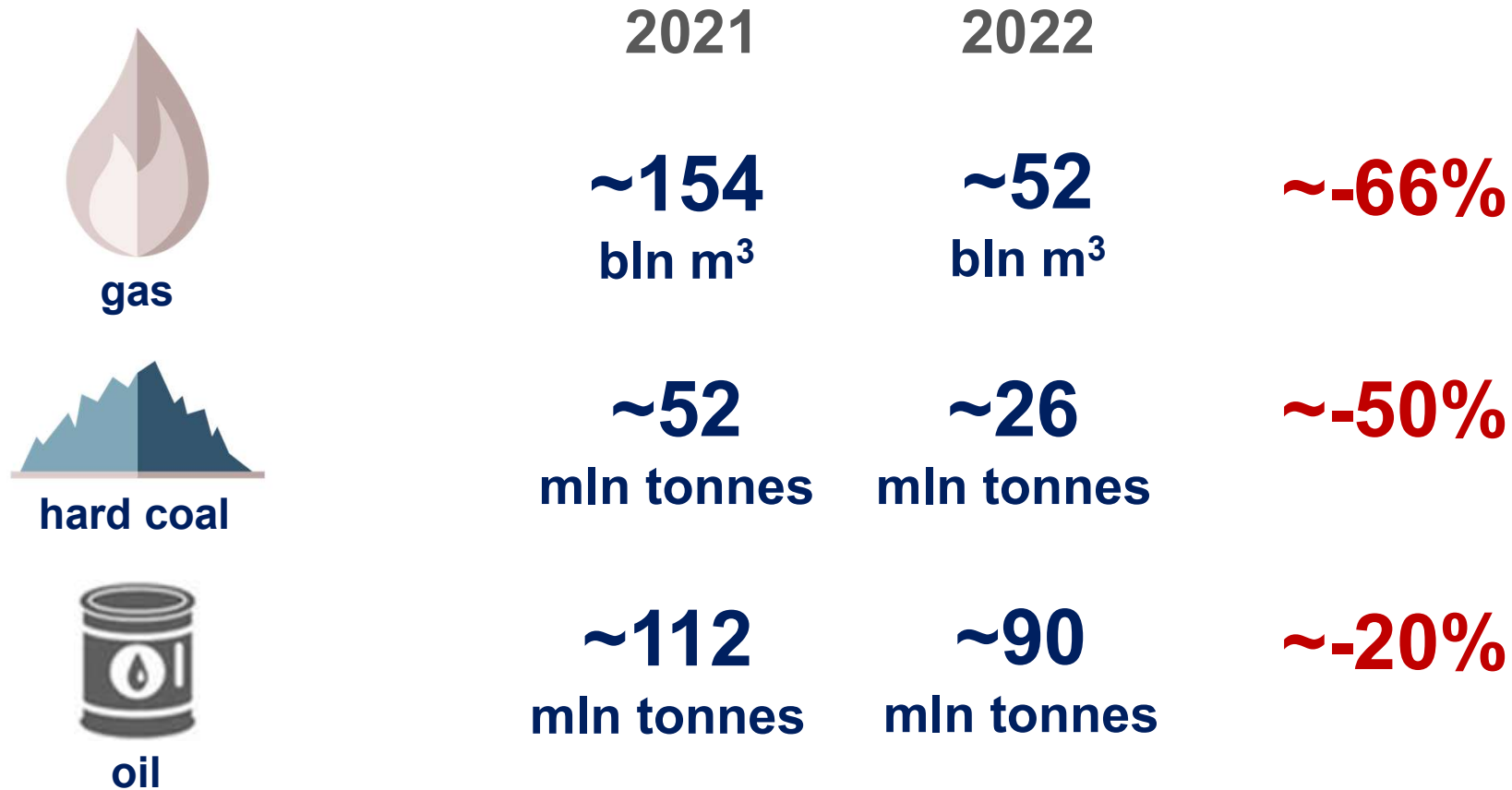
China



South Korea



Import of energy resources from Russia to the EU



In 2022, imports of hydrocarbons from Russia decreased by ~45% on average.

Gas extraction in Russia [bln m³]

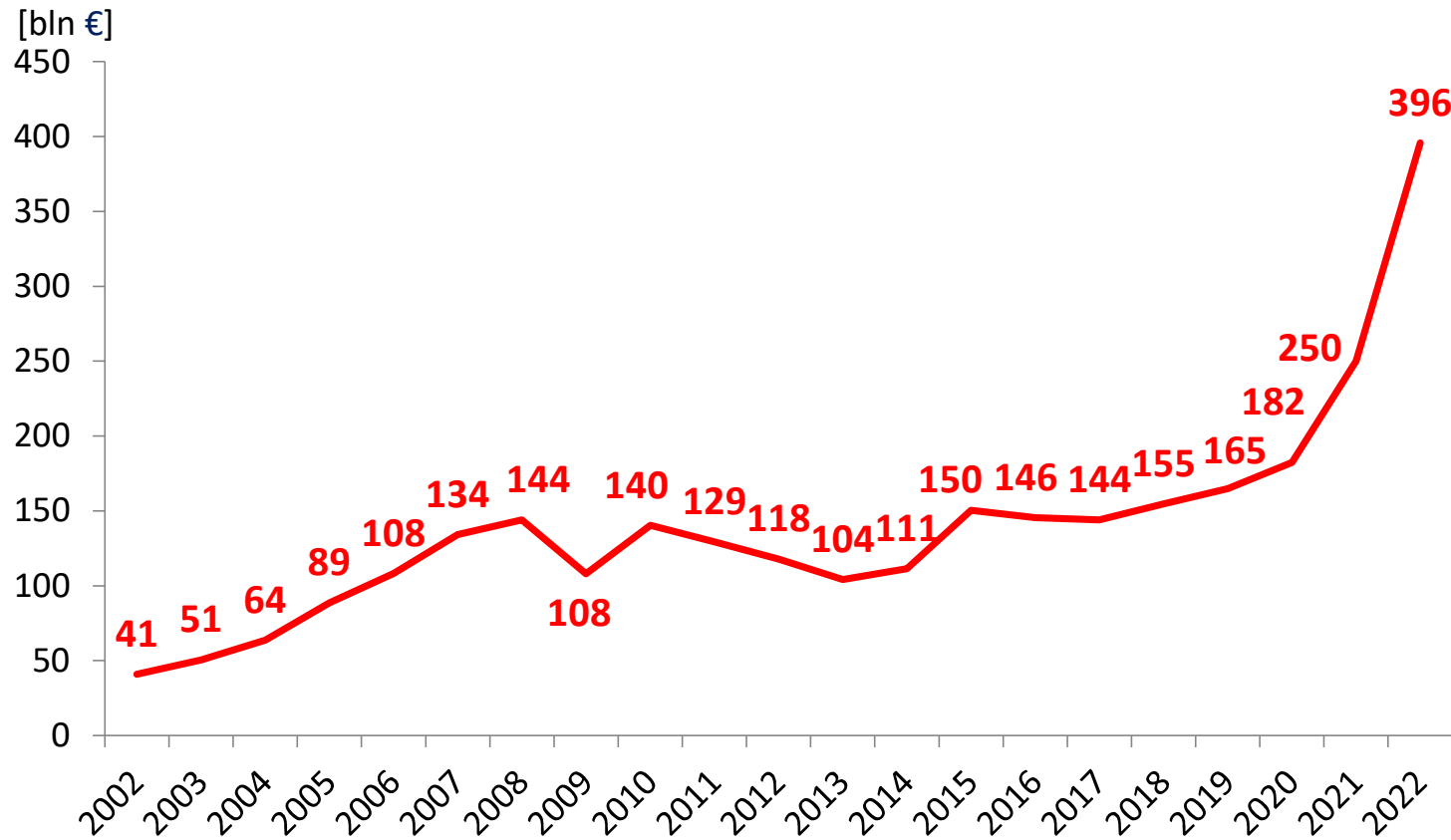
2021		2022		
762		672	↓	~-12%
515		413	↓	~-20%
43	 Rosneft	69	↑	~60%
77	 NOVATEK	84	↑	~8%

Market value of gas sold by Russia

2021	~480 bln USD
2022	~1 050 +120% bln USD y/y

As a result of the sanctions imposed on Russian hydrocarbons, the production of Russian gas fell by 12% y/y. The increase in average market gas prices in 2022 by ~150% y/y translated into a significant increase in the value of gas sold by Russia.

EU's negative trade balance with China



Italy

~41 BLN €



Spain

~34 BLN €



Belgium

~27 BLN €



France

~25 BLN €



Germany

~23 BLN €

Russia has redirected supply of Energy resources mainly to Asian markets.

China's access to Russian gas, oil and coal for the production of cheap electricity has deepened the negative trade balance between the EU and China.

Consequences of a long-term negative trade balance

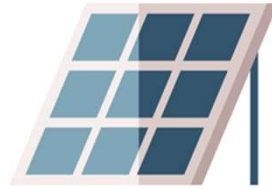
1. Limitation of domestic production capacity and a decrease in the competitiveness of the economy,
2. Economic growth slowdown,
3. Currency depreciation,
4. Increase of unemployment,
5. Deflation,
6. Acquisitions of domestic entities by foreign capital.

„The only way that we can reduce our financial dependence on the inflow of funds from the rest of the world is to reduce our trade deficit”

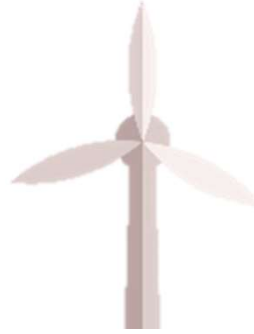
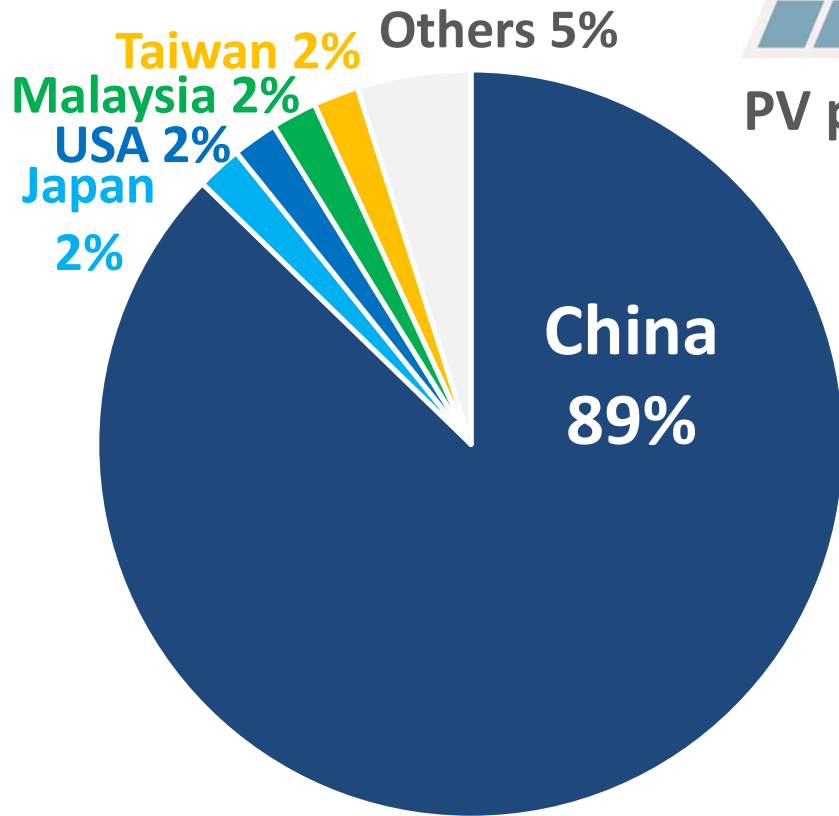
Professor of economics Martin Feldstein (Harvard University)

United States Chairman of Council of Economic Advisers

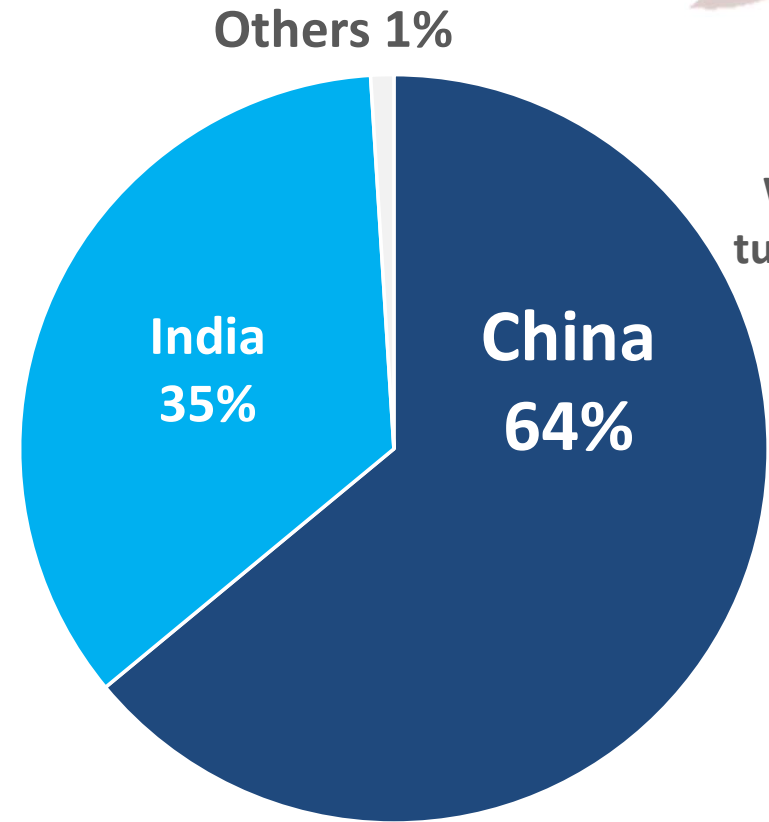
EU dependence on imports of raw materials for green technologies



PV panels

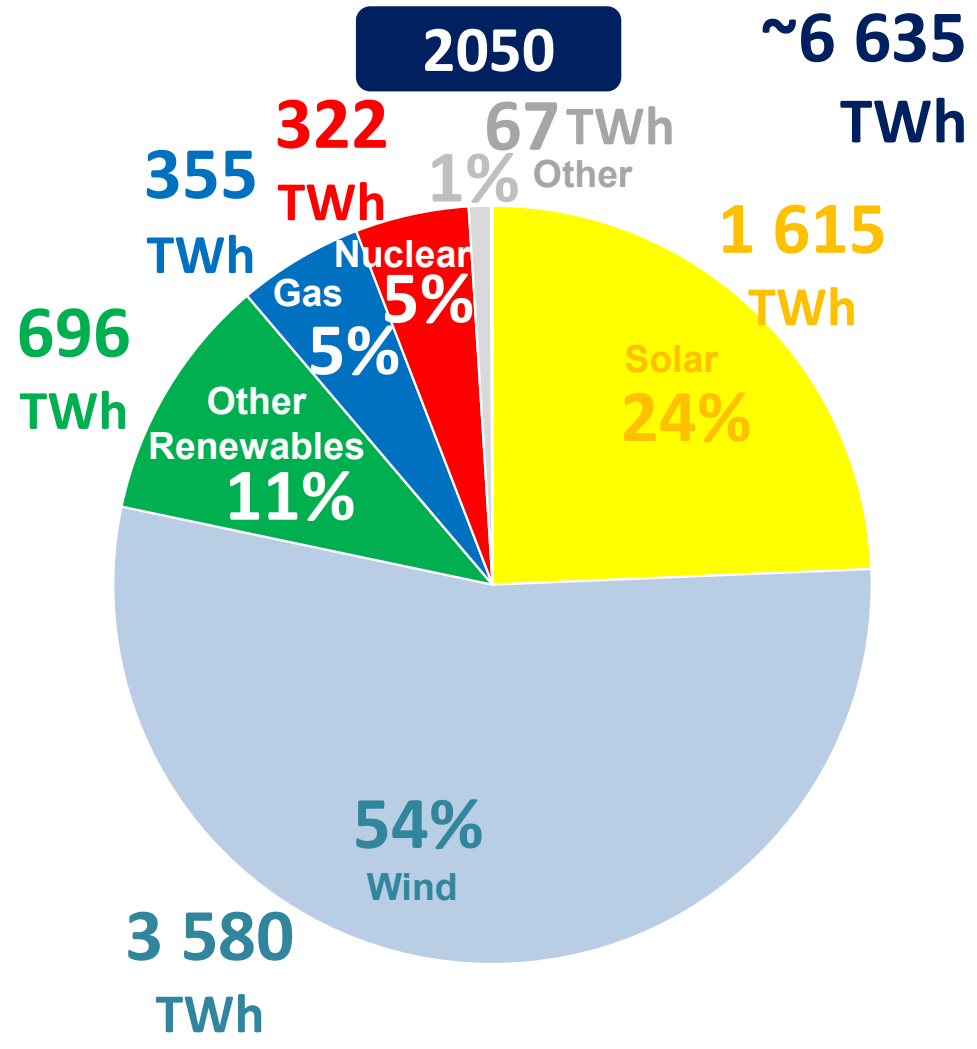
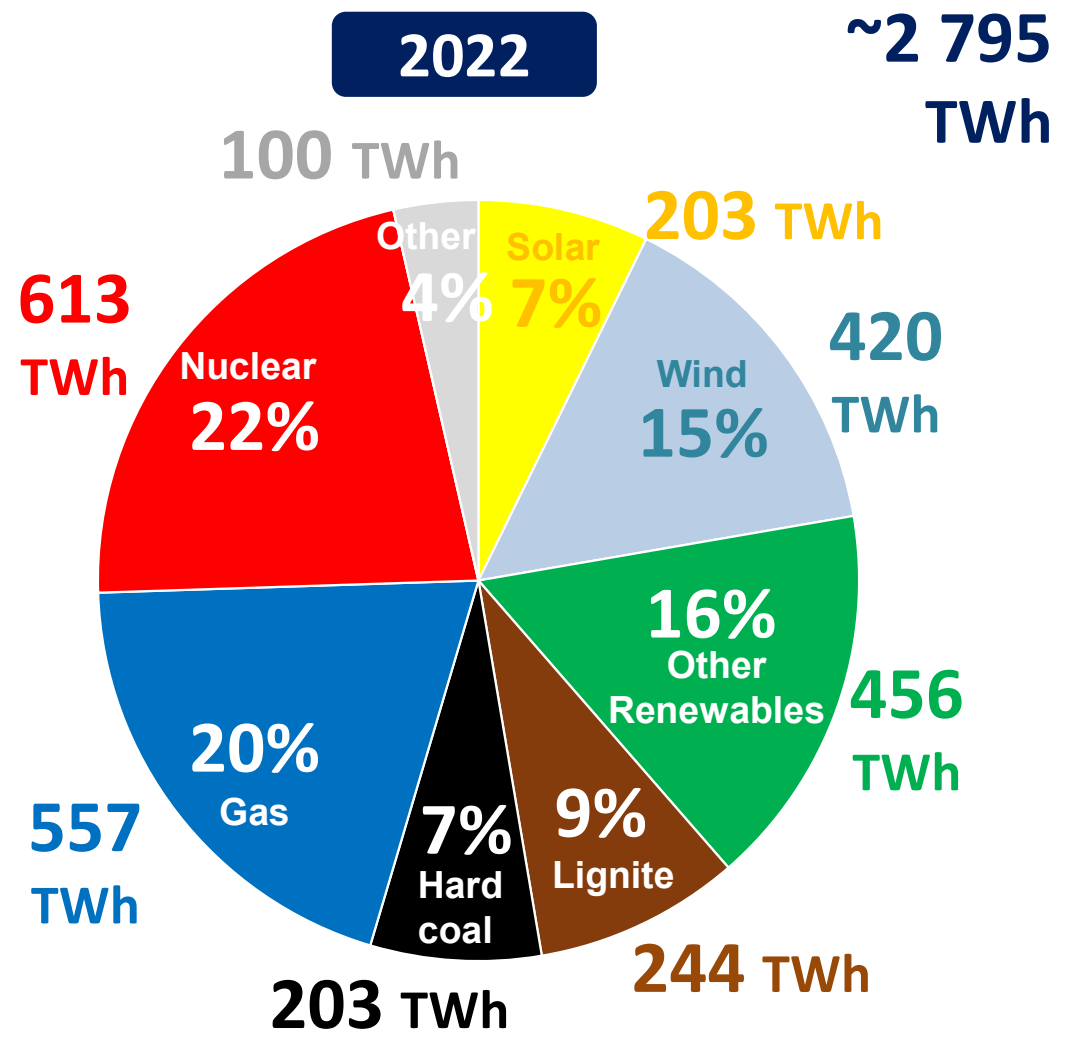


Wind turbines



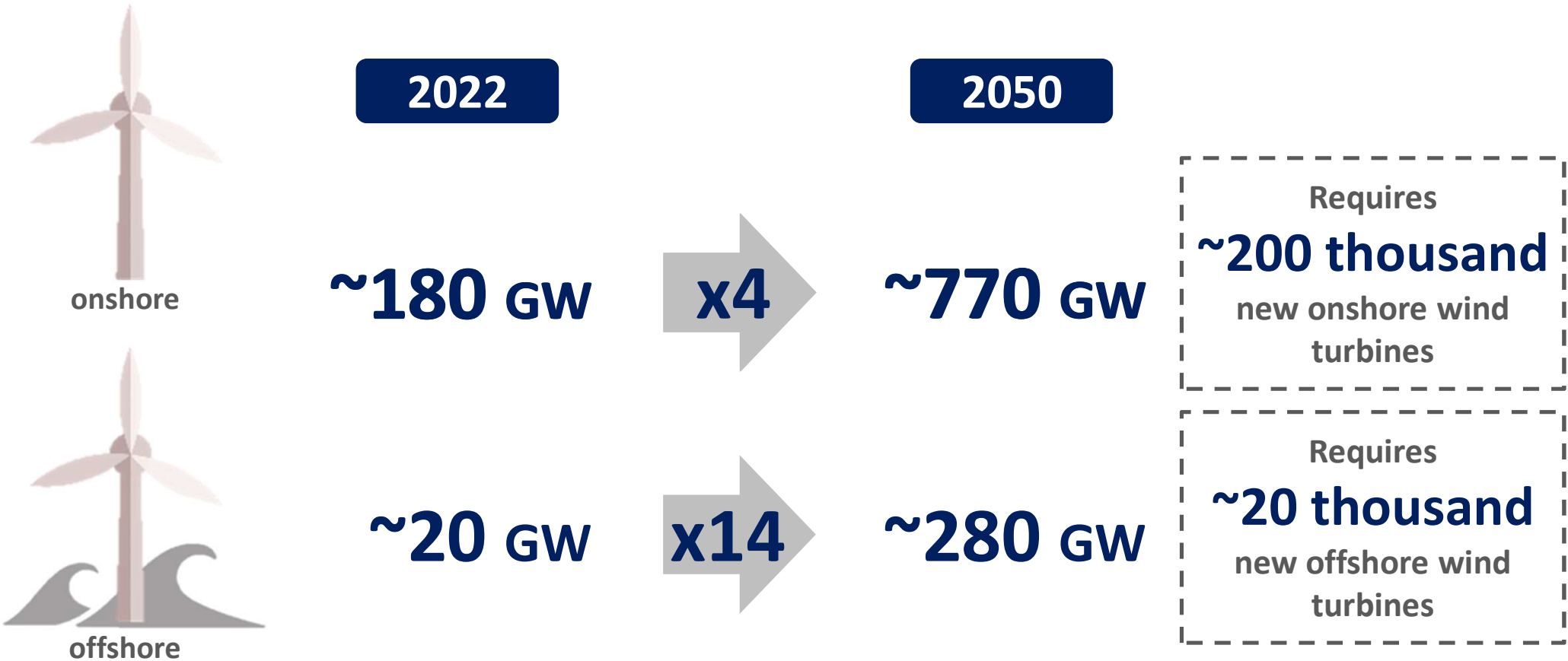
The EU replaces ~40% dependence on Russian hydrocarbons with over ~90% dependence on renewables produced in China and other Asian countries.

EU's Energy mix



In 2050, ~90% of electricity produced in the EU will come from Renewables. Only ~10% of energy is to be produced in stable sources, i.e. mainly from nuclear, gas and hydrogen.

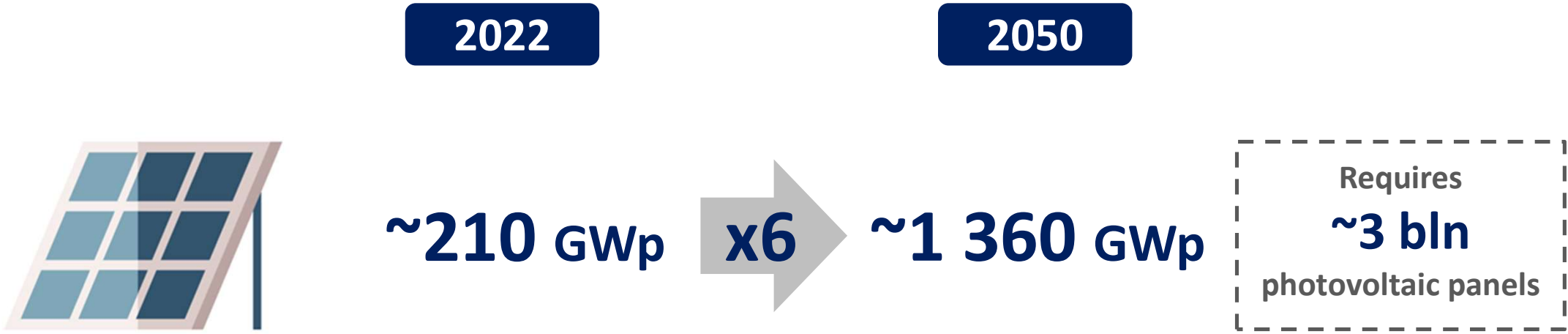
Demand for wind turbines in EU



Producing ~220 thousand wind turbines requires ~120 mln tons of steel.

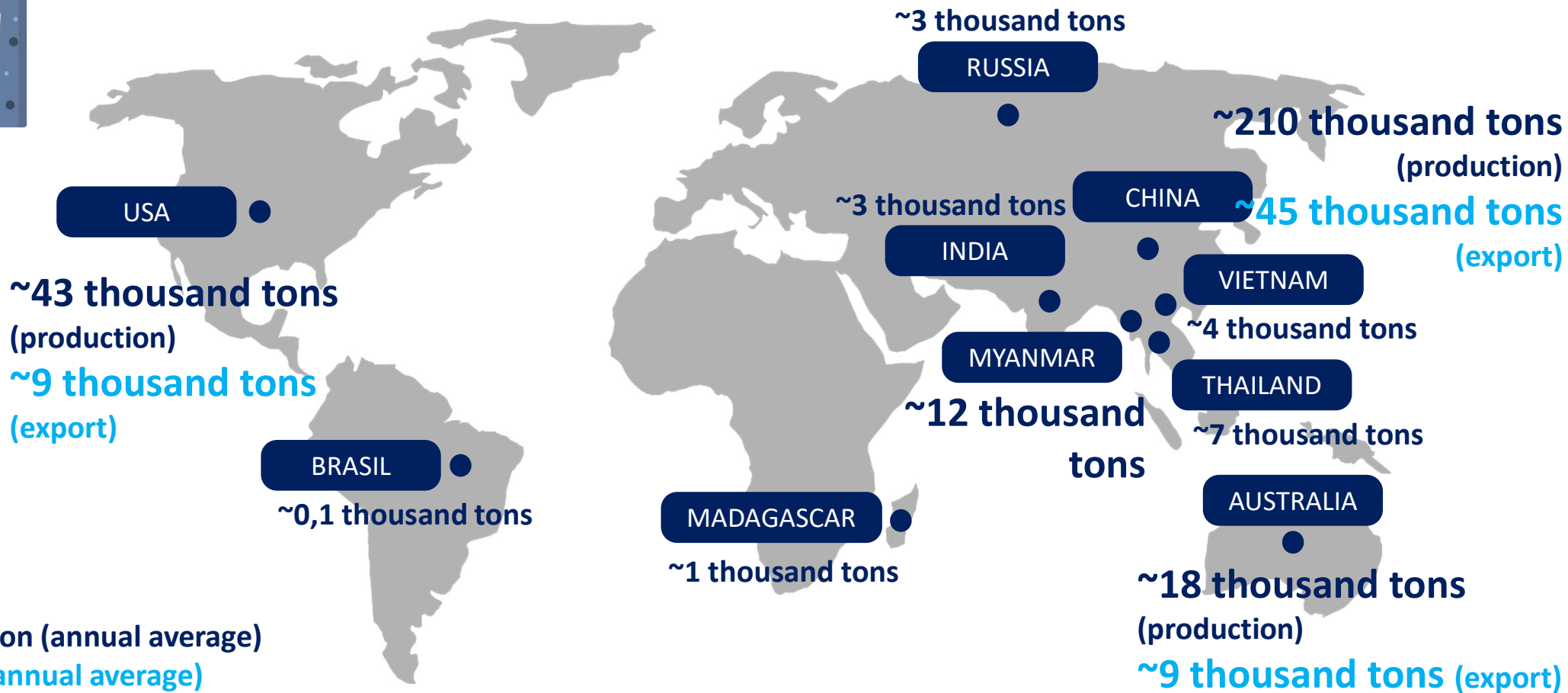
Requires ~5 times higher rate of implementation of investments in wind farms than currently, which will increase the EU's dependence on components produced in China and India.

Demand for photovoltaic panels



The pace of implementation of investments in PV panels needs to be ~3 times higher than currently, which will increase the EU's dependence on PV panels mainly produced in China.

79% of rare earth metals are exported from Asia

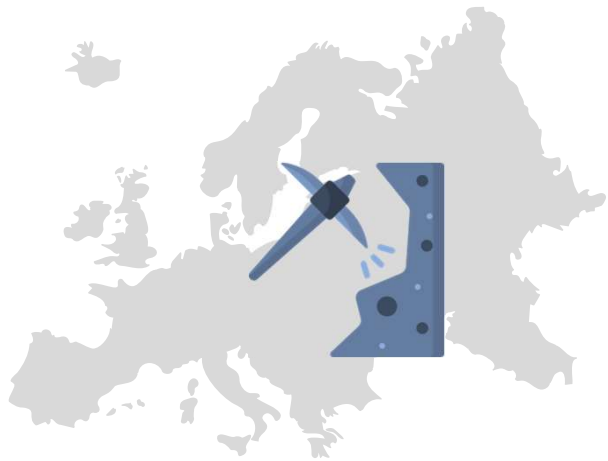
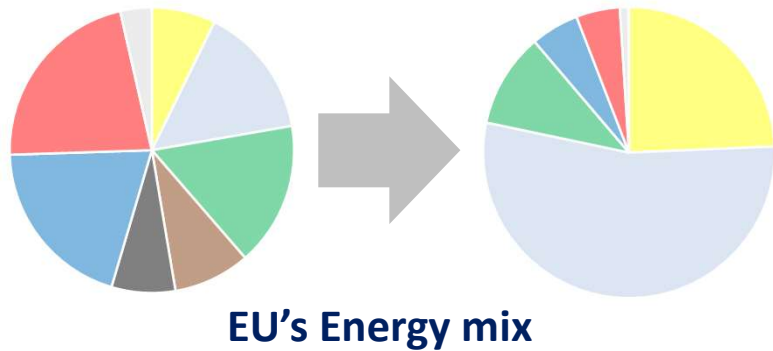


EU's Critical Raw Materials Act

To strengthen the CRM supply chain and diversify imports EU needs to meet the following targets by 2030:

- At least **10%** of the EU's annual consumption of CRMs must come from EU mining operations,
- At least **40%** of the EU's CRMs needs to be processed in Europe,
- At least **15%** of the EU's annual consumption must come from recycling,
- Not more than **65%** of each strategic raw material at any relevant stage of processing must come from a single third country.

Conclusions



1. During the energy transformation, the EU should ensure access to its own independent energy resources.
2. The EU should protect mining competences, which are carried by employees working in mining companies. These competences will be crucial in extracting our own critical raw materials and rare earth elements without which the green transformation will not be possible.



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Thank you for your attention

*Tomasz Rogala PhD,
Chairman of the Management Board of
Polish Mining Group
EURACOAL President*



Warsaw, June 2023