

GROUP 1

THE GREEN TRANSITION & THE GOVERNANCE OF NEW DEPENDENCIES:



**STRATEGIC AUTONOMY, SUPPLY CHAINS, & THE UPSTREAM
TRANSFORMATION OF EU ENERGY LAW**

Research Question:

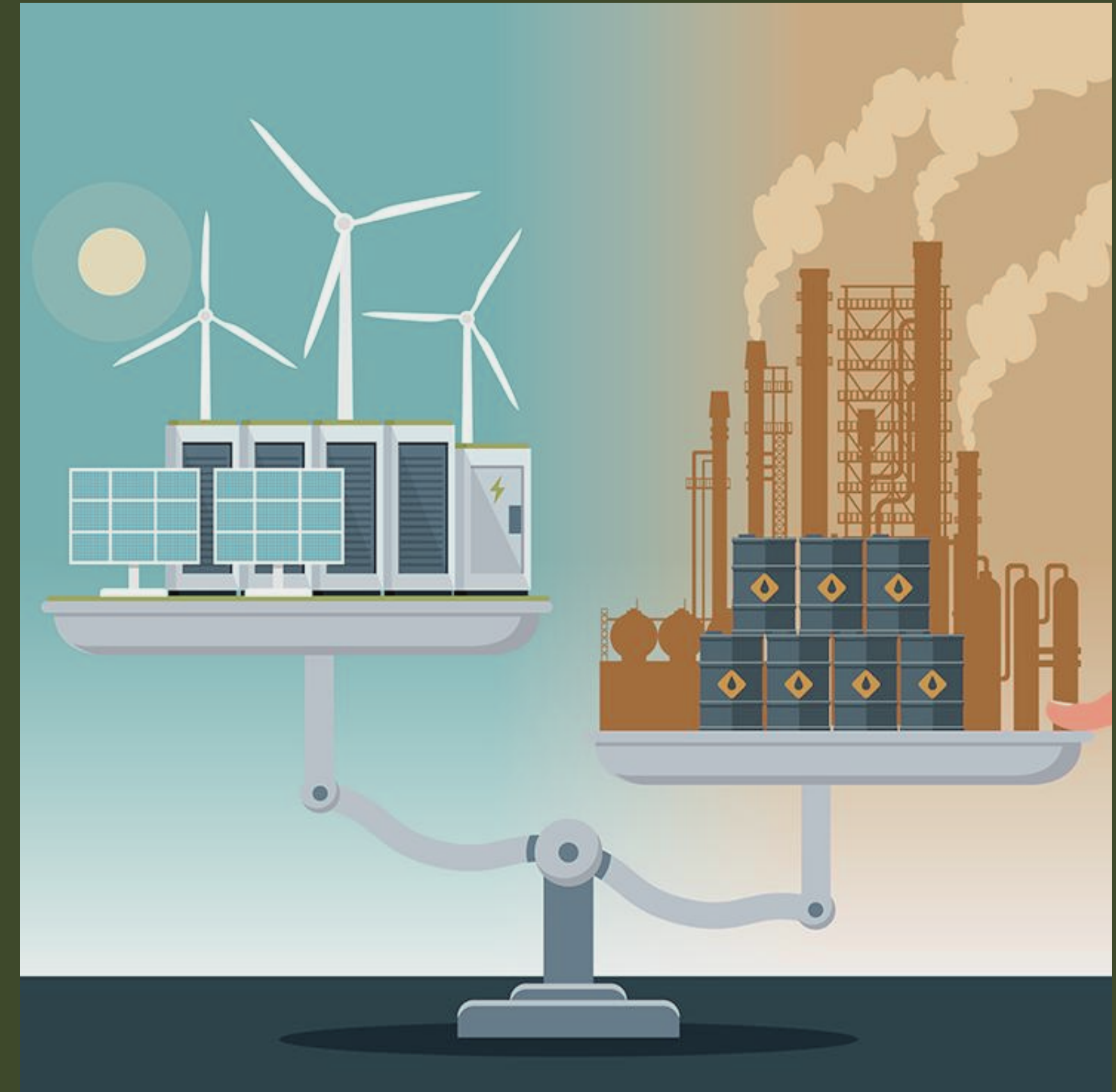
Can the EU pursue strategic autonomy in the green transition without reproducing new forms of dependency and environmental externalization?



INTRODUCTION: THE GREEN TRANSITION AND NEW DEPENDENCIES

- **Traditional narrative:** Decarbonization reduces fossil fuel import dependence (oil, gas, coal) → greater Energy independence, security, and resilience
- **Our argument:** Decarbonization simultaneously creates new material dependencies on critical minerals, generating strategic vulnerabilities and externalizing environmental & social harms through ‘green extractivism’.
- Reduced fossil fuel dependence
- Increased reliance on critical mineral supply chains
- New geopolitical and legal vulnerabilities

IEA GLOBAL CRITICAL MINERALS OUTLOOK 2025; CRITICAL RAW MATERIALS ACT (REGULATION (EU) 2024/1252) ; INTERNATIONAL ENERGY AGENCY



THE GOVERNANCE SHIFT: FROM ENERGY SECURITY TO MATERIAL SECURITY



Old Energy Security Model

- Oil and gas access
- Pipelines and fuel imports
- Market integration

New Material Security Model

- Critical raw materials
- Extraction + refining + processing
- Supply-chain resilience

CRITICAL MINERALS AND EMERGING DEPENDENCIES

Key Critical Minerals

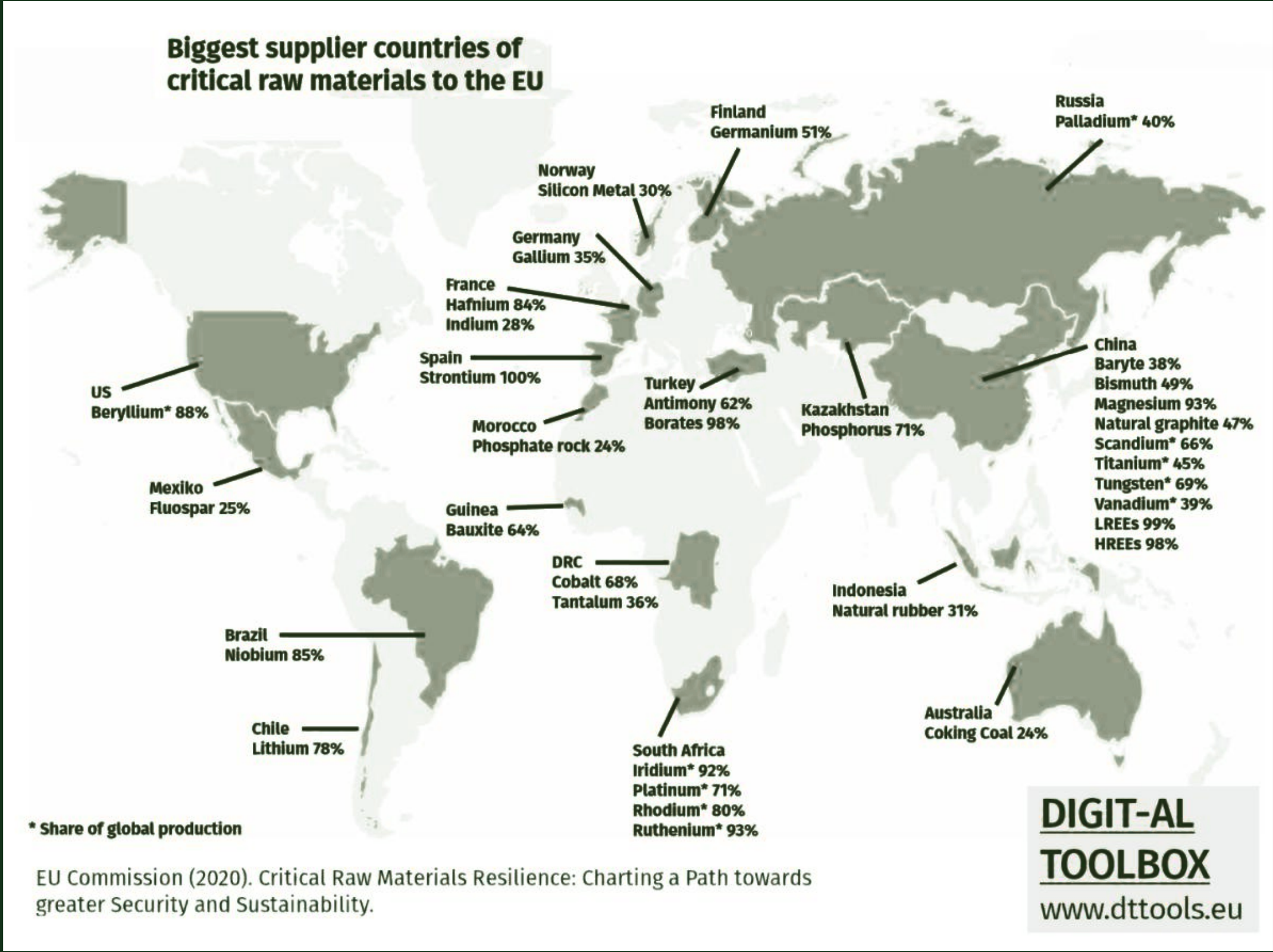
- Lithium
- Cobalt
- Nickel
- Rare earth elements

Supply Concentration

- China → processing dominance
- DRC → cobalt extraction
- Chile → lithium production
- Indonesia → nickel production

Core Insight:

Energy security now depends on supply chains, not just fuel imports



Looking
Inward for
Heightened
Control

The EU
Critical Raw
Materials Act

Clean
Industrial
Deal

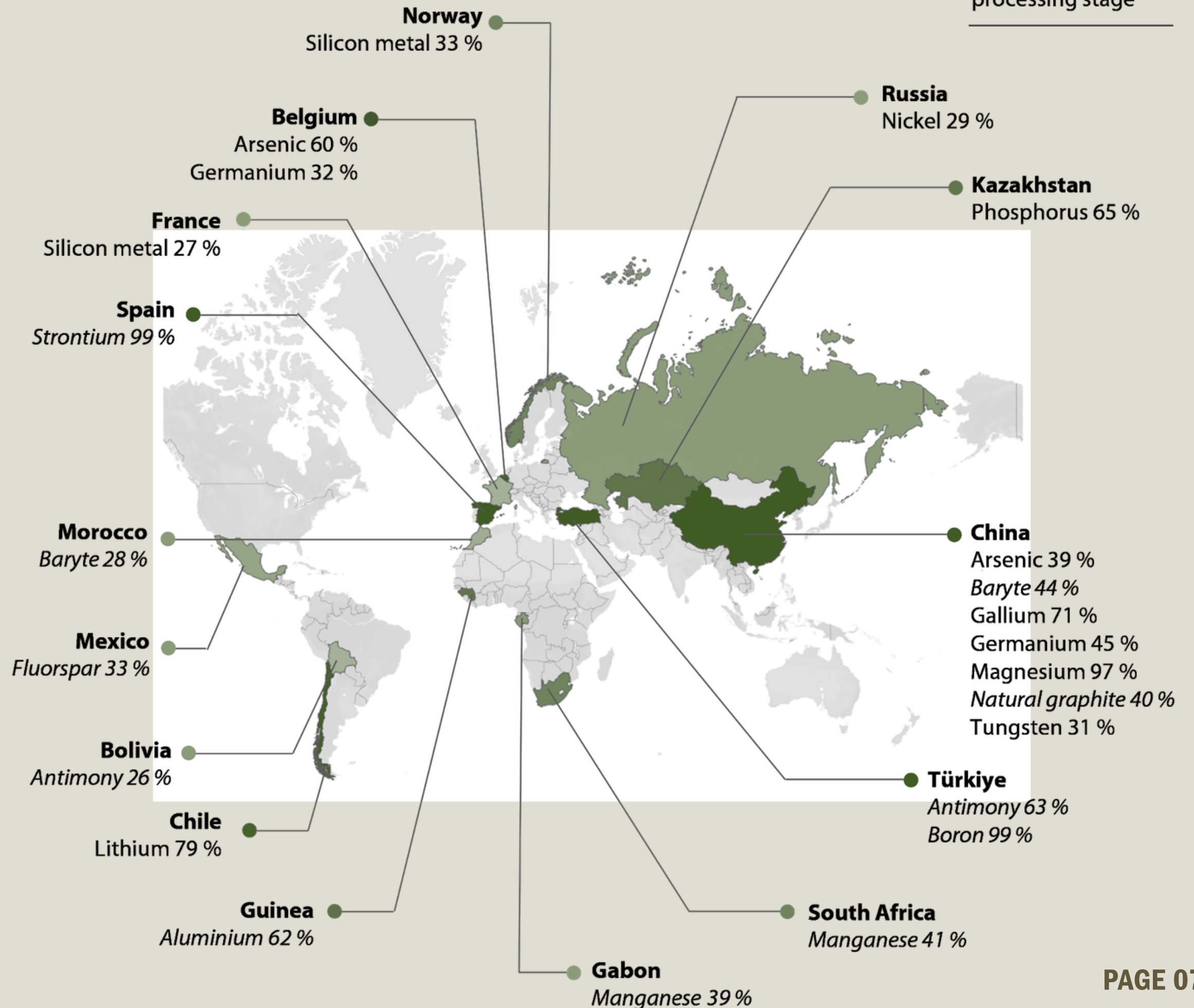
THE EU RESPONSE: GOVERNING SUPPLY CHAINS

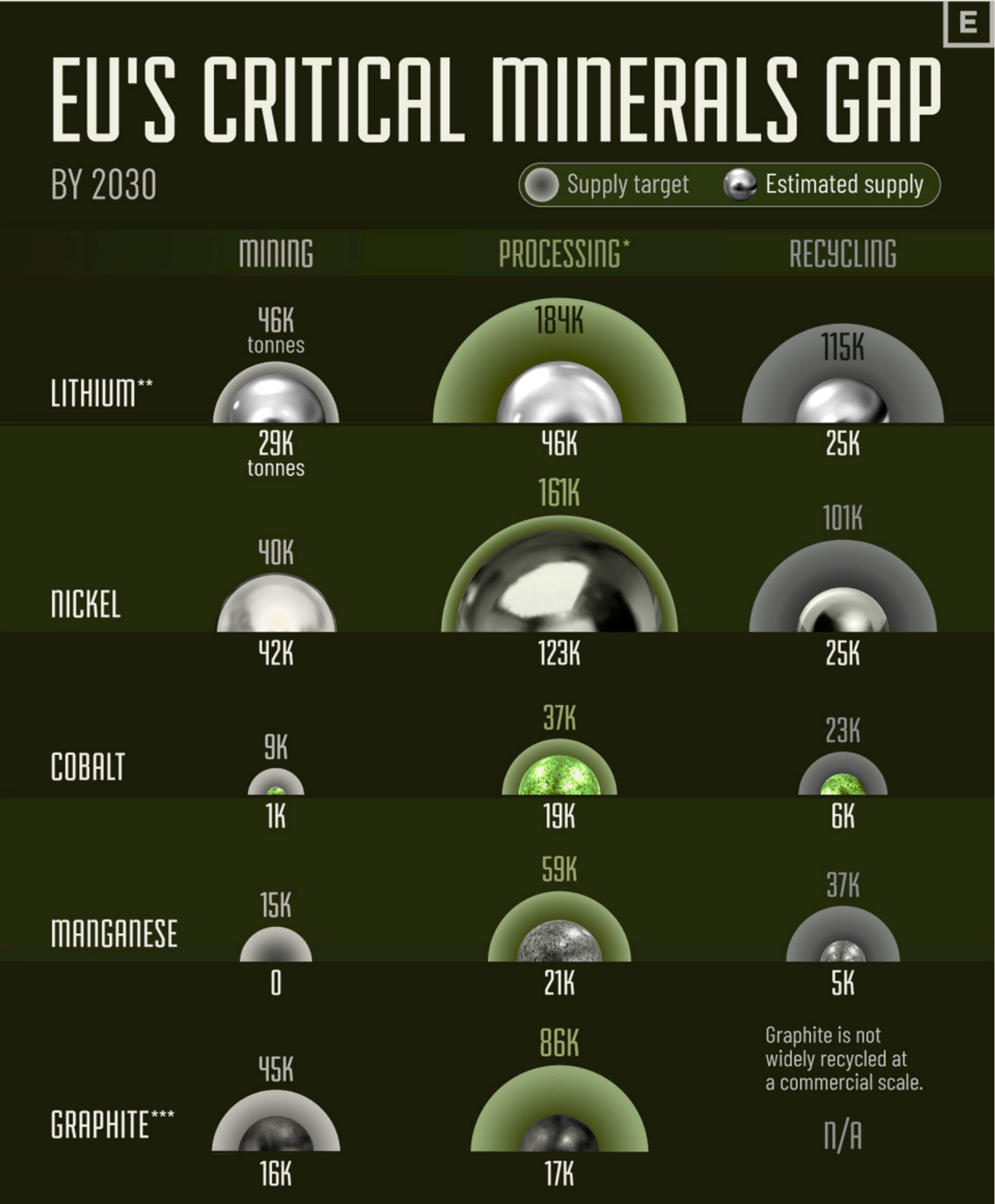


STRATEGIC AUTONOMY: SECURITY OR SUSTAINABILITY?

- The Security v. Sustainability trade-off
- Great New Dependencies
- The Open Strategic Autonomy Framework
- Resource Reliance and its Severity

EUROPEAN COMMISSION, OPEN STRATEGIC AUTONOMY; MINING VISUALS, THE EU'S RACE FOR CRITICAL RAW MATERIALS: NAVIGATING SUPPLY RISKS (2026); EUROPEAN COURT OF AUDITORS, SPECIAL REPORT 04/2026





THE LIMITS OF CURRENT GOVERNANCE TOOLS

Issues that Governance can't fix

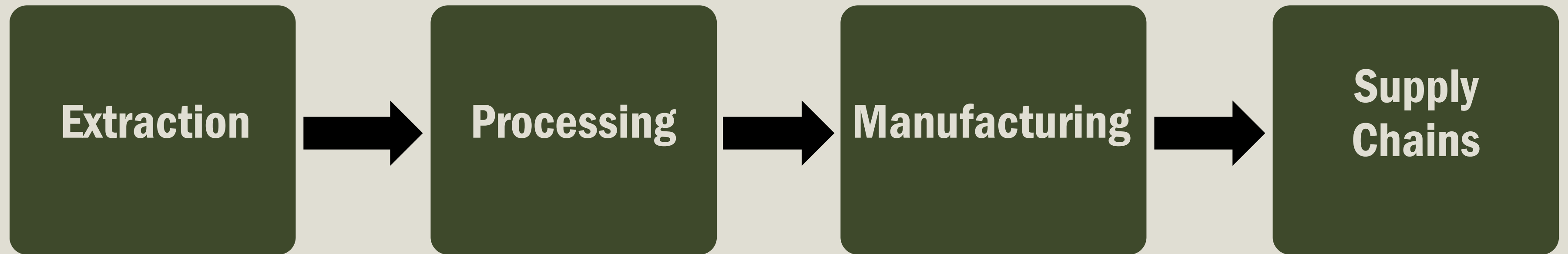
Auditors Warn: EU Risks Missing Targets

Rising Demands, and Infrastructural Catch-up

Response in Trade and Sustainability Compromises

MATERIAL DISPATCH, EU CRITICAL RAW MATERIALS ACT: 2030 TARGETS, NO MINES, AND THE 25% RECYCLING GAP; EUROPEAN COURT OF AUDITORS, SPECIAL REPORT 04/2026; EUROPEAN COMMISSION, EUROPEAN CRITICAL RAW MATERIALS ACT.

STRATEGIC AUTONOMY AND THE UPSTREAM SHIFT IN ENERGY GOVERNANCE



Traditional governance:
Production → Consumption

- Energy markets
- Fuel imports
- Infrastructure

Question:
Has energy security become
material security?

GREEN EXTRACTIVISM AS A GOVERNANCE PROBLEM

Examples:

- Lithium — Chile
- Cobalt — DRC
- Rare earths — China

Who bears the costs of transition?



BENJAMIN K. SOVACOO ET AL., SUSTAINABLE MINERALS AND METALS FOR A LOW-CARBON FUTURE, 367 SCIENCE 30, 30-33 (2020).; U.N. CONF. ON TRADE & DEV., COMMODITIES AT A GLANCE: SPECIAL ISSUE ON STRATEGIC BATTERY RAW MATERIALS 13-22, UNCTAD/DITC/COM/2019/5 (2020).; INT'L ENERGY AGENCY, THE ROLE OF CRITICAL MINERALS IN CLEAN ENERGY TRANSITIONS 21-28 (2021).

RESPONSIBILITY BEYOND EU BORDERS



Governance tools:

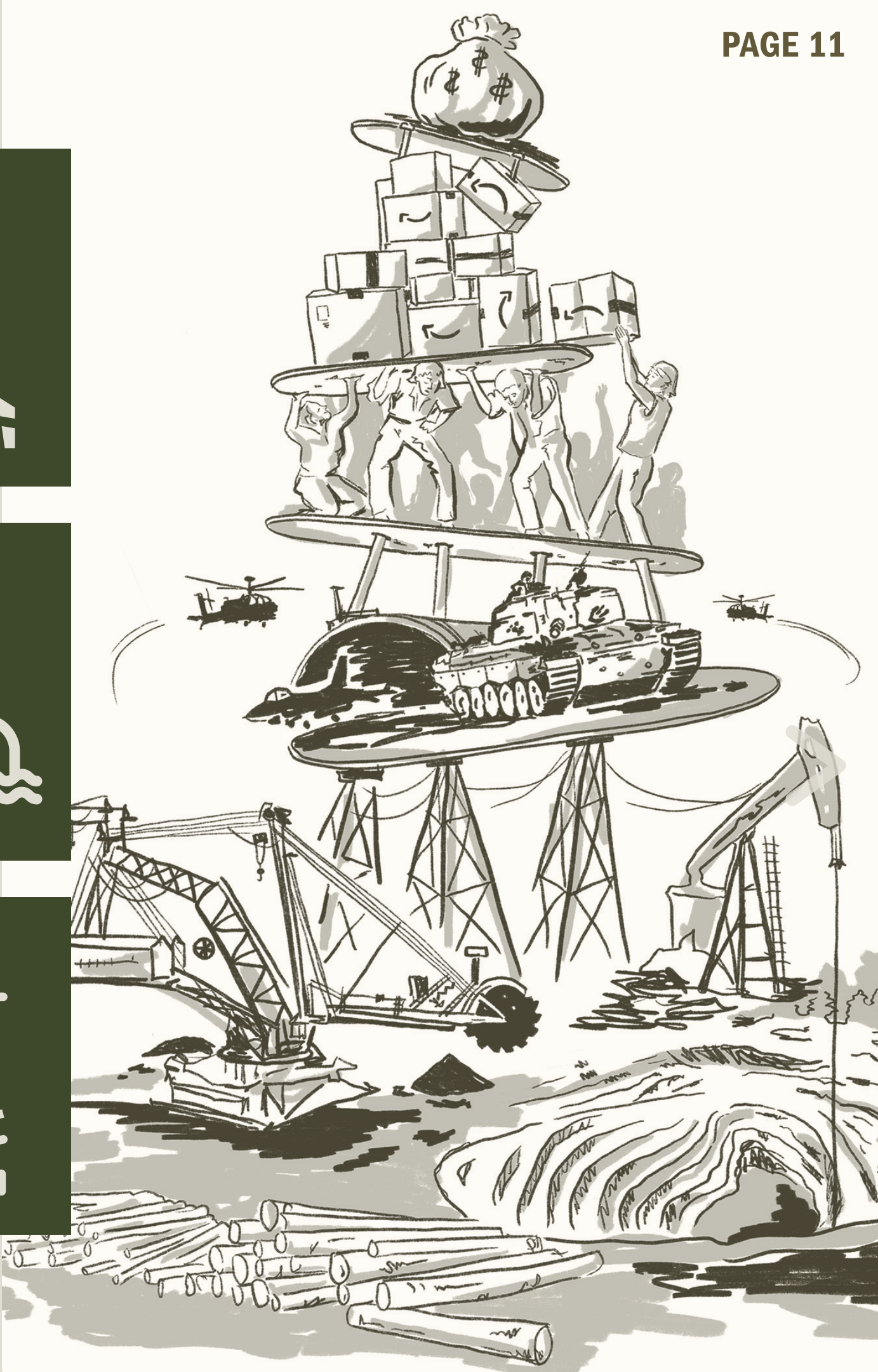
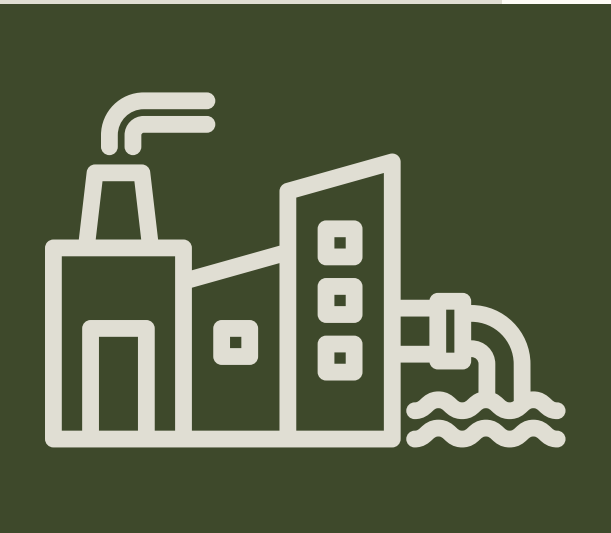
- Due diligence
- ESG
- Trade measures

Problem:

Resilience



Accountability



CONCLUSION: A NEW ERA OF ENERGY GOVERNANCE

The transition changes dependency. It does not eliminate it

EU governance moves upstream and increasingly extends into supply chains

Long-term legitimacy depends on addressing external impacts

Final Question:

Can the EU achieve strategic autonomy without reproducing new forms of dependency and environmental externalization?



A photograph of four white wind turbines standing on a lush green hill. The sky is a deep, dark blue, suggesting dusk or dawn. The turbines are spaced out across the ridge of the hill. The overall mood is contemplative and serious.

QUESTIONS?