

# Energy intensive industries

Trends in EU from 2000 to 2025



# Methodology



European  
commission

## 1.2. Scoping the EII industrial ecosystem

The **Energy Intensive Industries (EII) industrial ecosystem** covers the chemicals, steel, pulp and paper, plastics, mining, extraction and quarrying, refineries, cement, wood, rubber, nonferrous metals, ferro-alloys, industrial gases, glass and ceramics industries<sup>13</sup>. In terms of the statistical classification of economic activities in the European Community (NACE), the industrial ecosystem definition includes:

- C16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
- C17 Manufacture of paper and paper products
- C19 Manufacture of coke and refined petroleum products
- C20 Manufacture of chemicals and chemical products
- C22 Manufacture of rubber and plastic products
- C23 Manufacture of other non-metallic mineral products
- C24 Manufacture of basic metals



VUB, IES, anno  
2018

# Outline



PRODUCTION  
OUTPUT

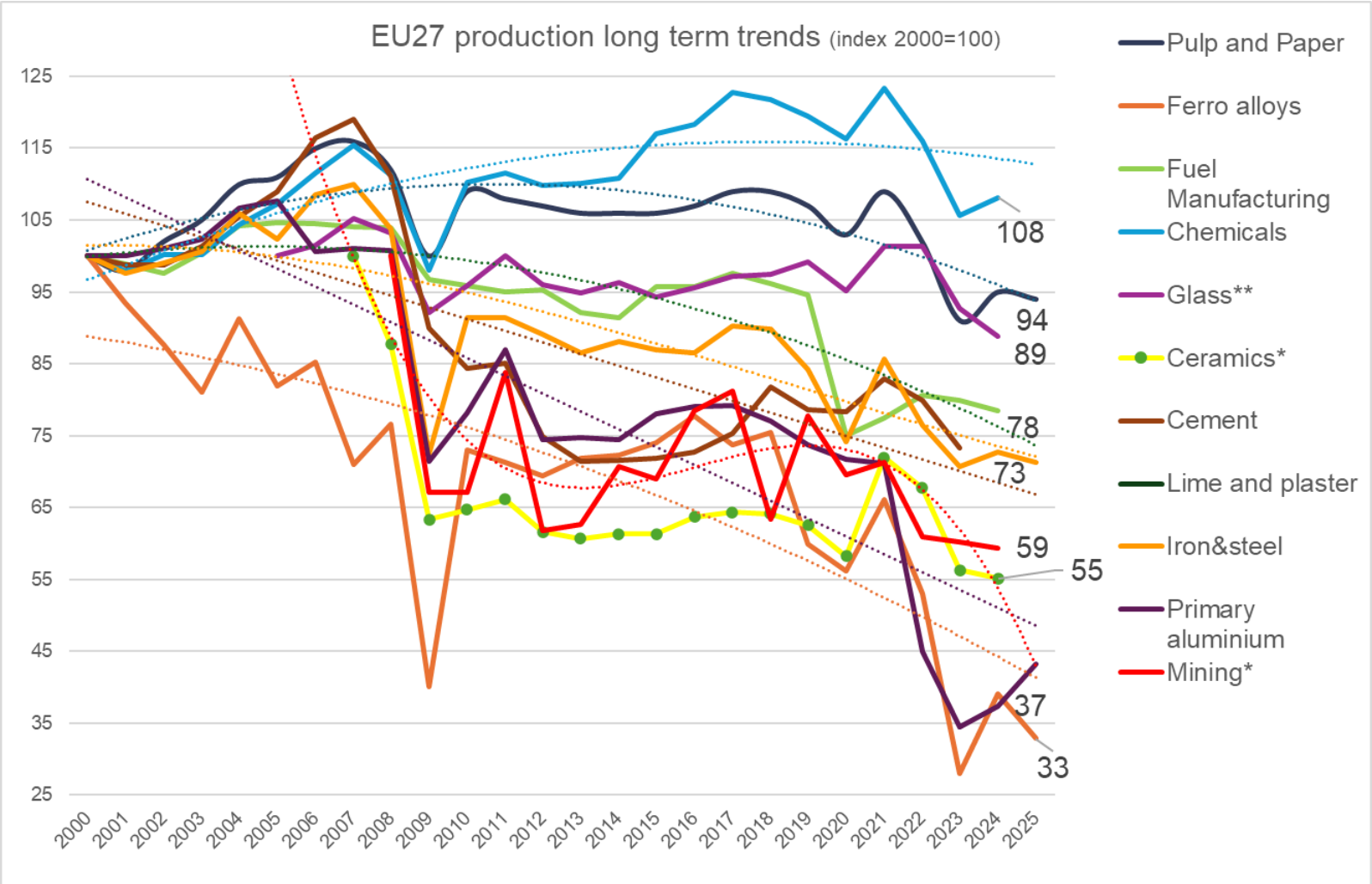


JOB



TRADE BALANCE

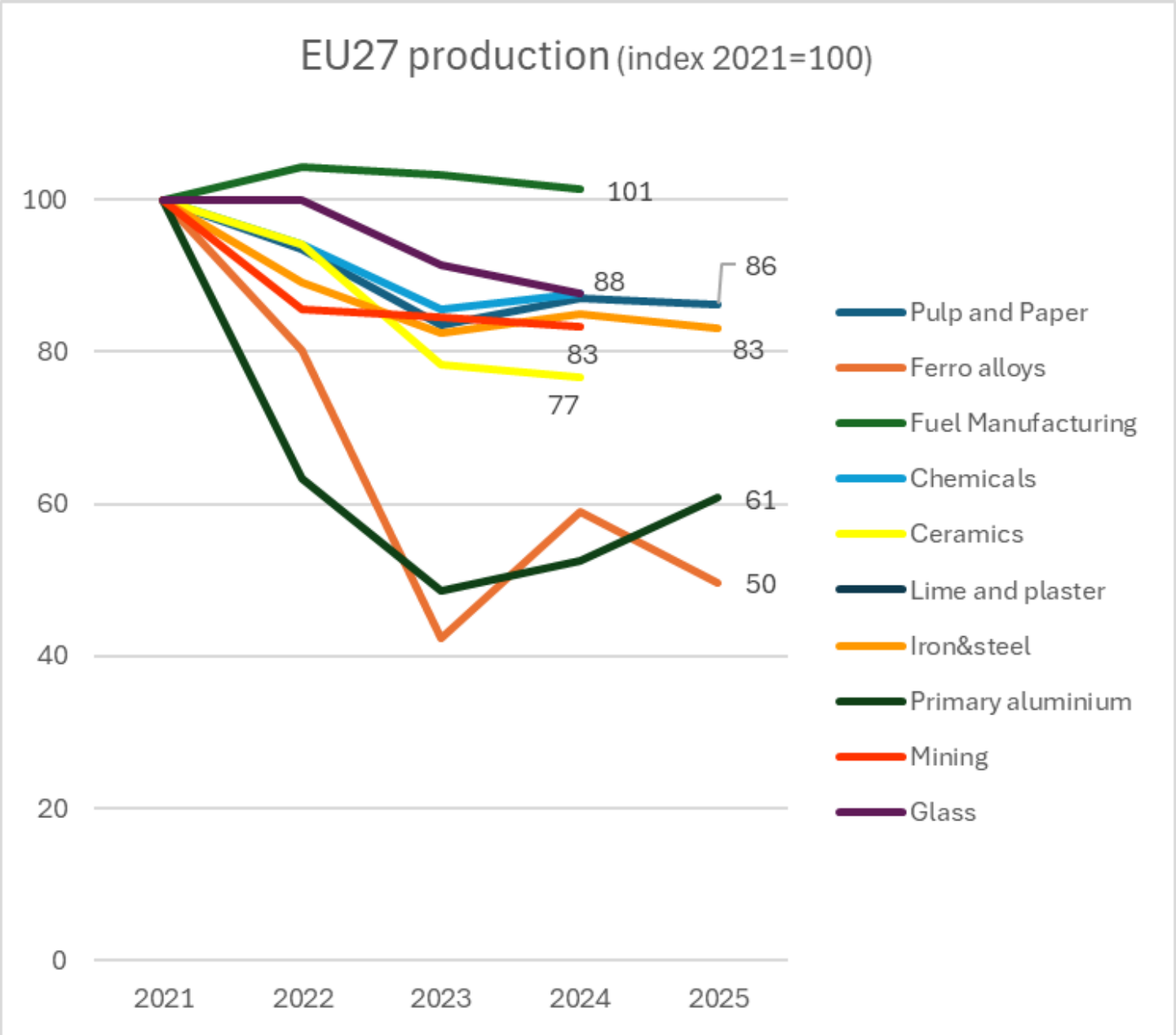
# Production output trend



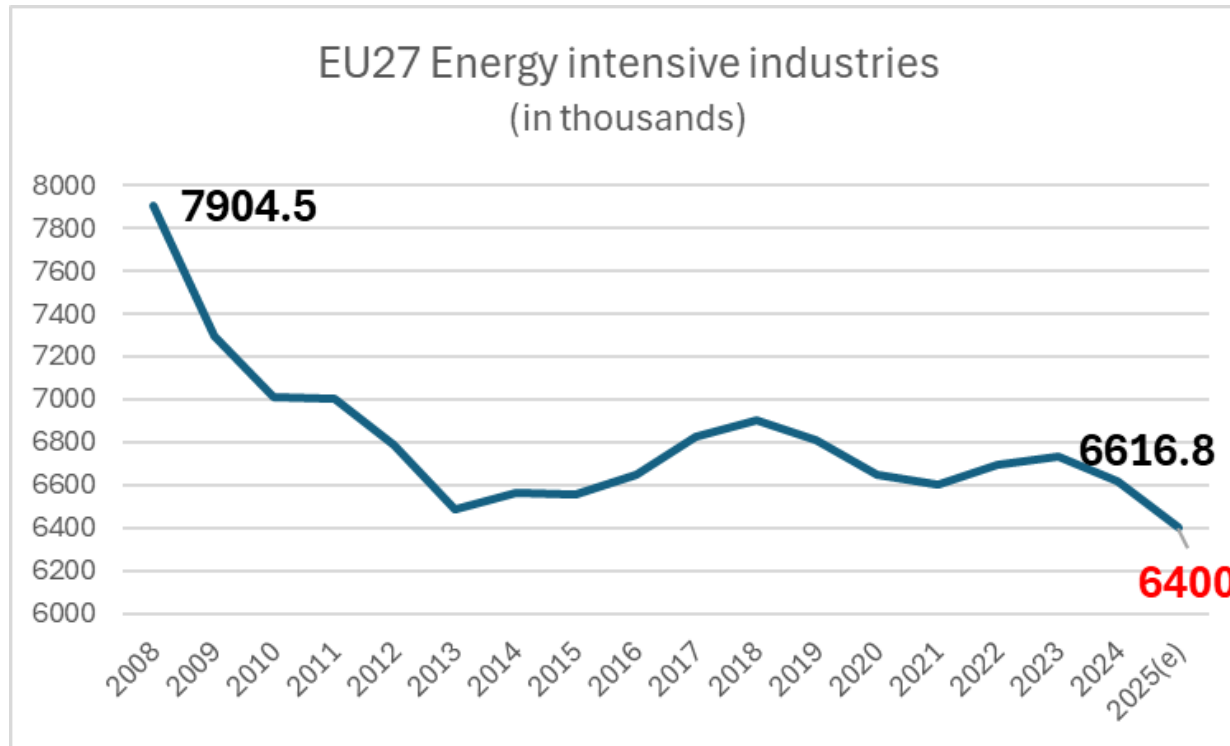
- Gain in production output up to 5 years ago, now 15 percentage point lower: chemicals
- Between 5 and 10% lost production: paper & pulp, glass
- Decline between 20 and 30% of the production output: cement, fuel manufacturing, steel...
- Around 40% less mining output; 45% less ceramics
- Between 60 and 70% production loss: primary aluminium, ferro alloys, ...
- *Source: industry associations*

# Production output trend

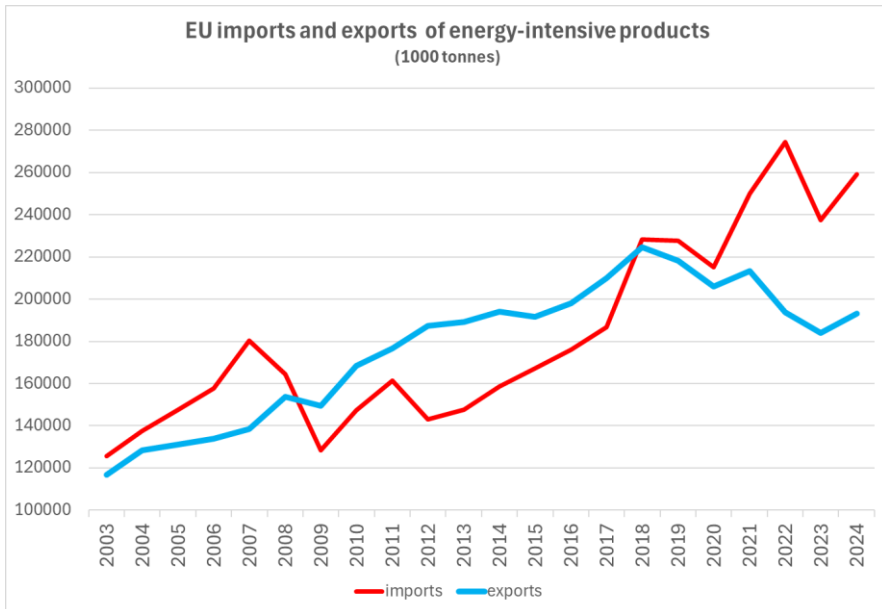
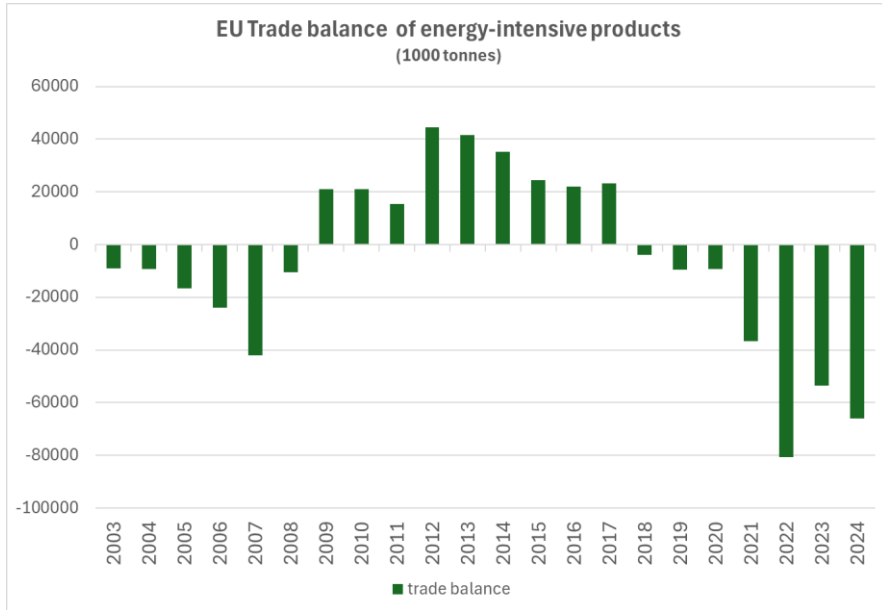
Source: industry associations



# Jobs



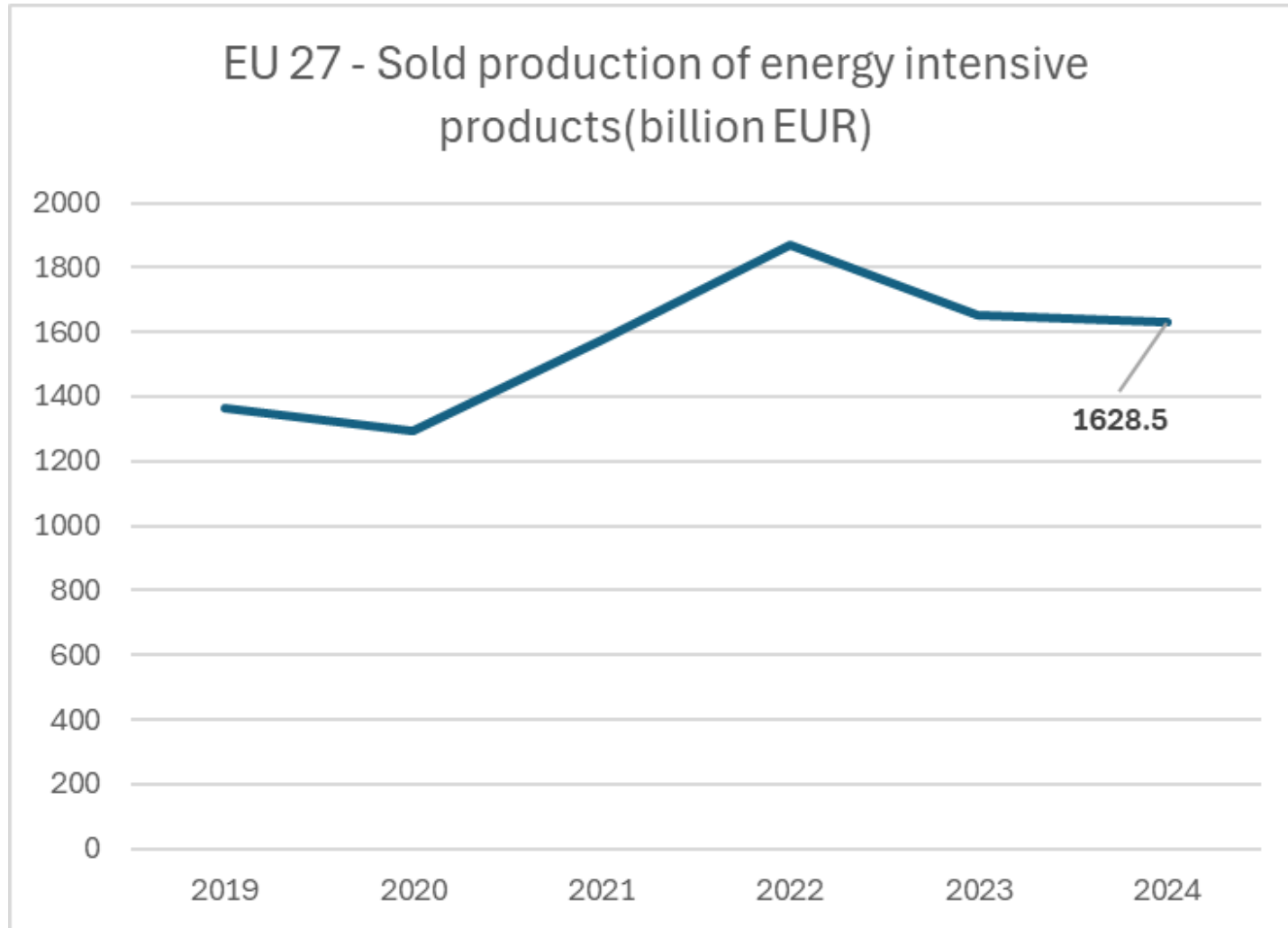
- Since 2008 about 1.5 million jobs were lost in the energy intensive industries in the EU or 1 on 5 jobs!
- Total jobs in the EU amounts to more than 6.6 million in 2024.
- Job loss in 2025 risks to be around 200.000 in the EU.
- *Source: Eurostat 2008 to 2024. Own elaboration for the year 2025.*



# Trade

- Since the start of the energy crisis imports rose quickly, whilst exports declined strongly.
- Trade deficit widens each year now.
- *Source: Eurostat*

# Turnover



Energy intensive industries are around 8% of total EU GDP

Source:  
*Eurostat*