

UK evidence on carbon leakage and the EU Emissions Trading System

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Independent analysis to date

- ◆ **Climate Strategies – funded by UK Govt and European collaborators**
 - Detailed evidence based analysis of specific sectors for which leakage is a concern.
 - Deep-dive study into EU Cement and Steel sectors

- ◆ **Oxford Economics modelling scenarios for UK Energy White Paper**
 - Model covers 30 sectors for each of the 27 EU Member States (+ US, Japan & China)
 - Data on industrial output and energy intensity from country level input-output tables (Eurostat)

Climate Strategies – published January

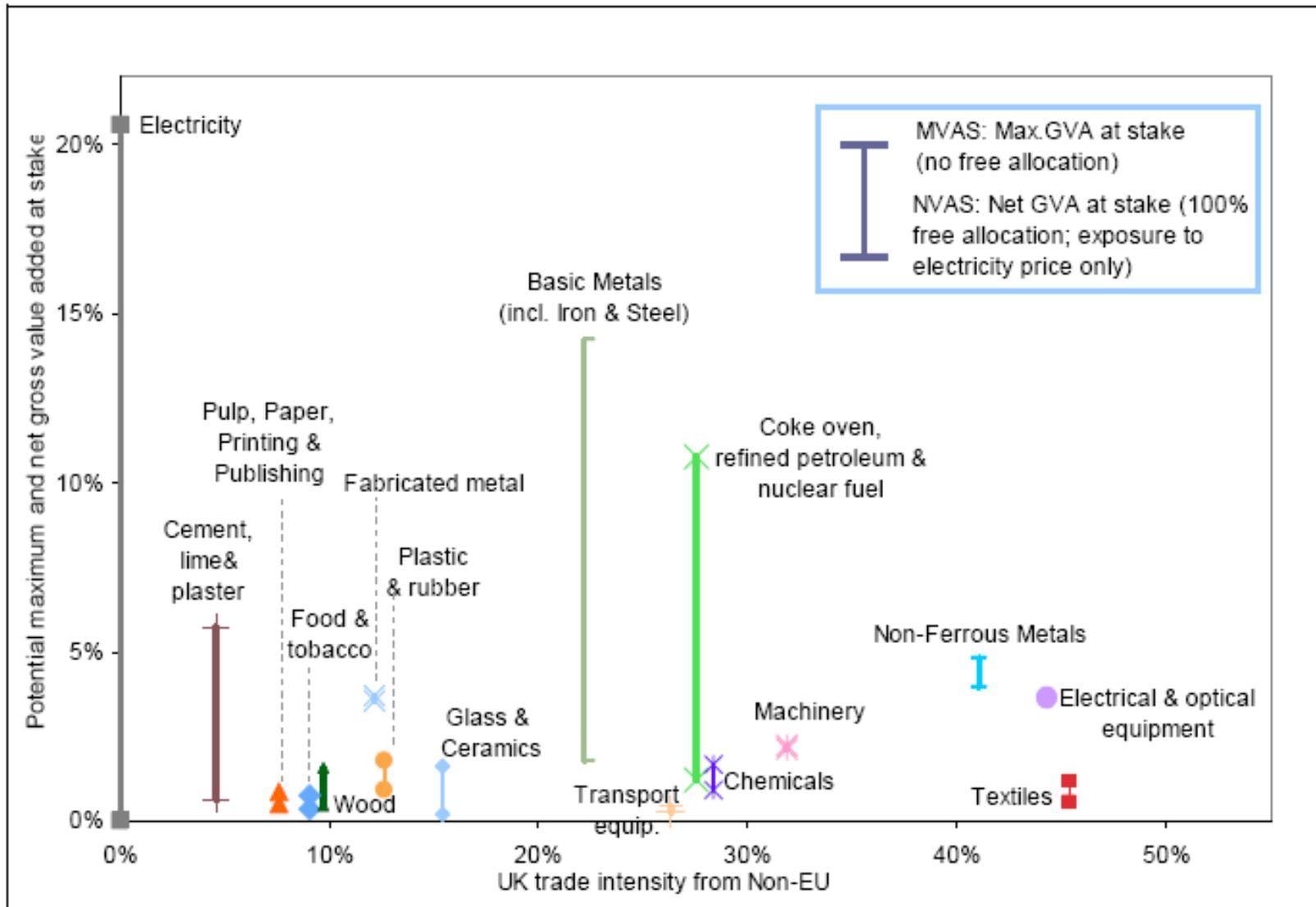
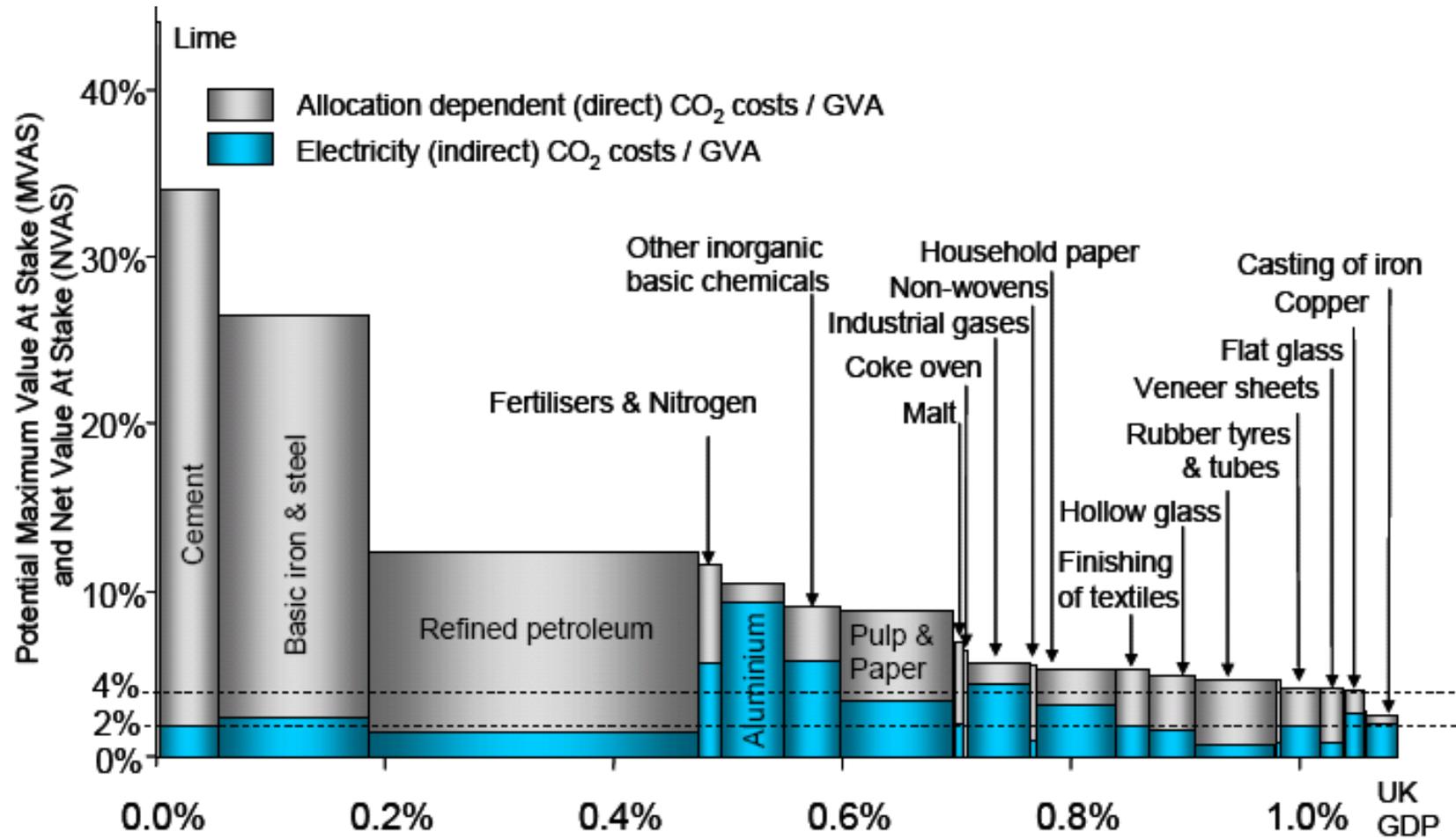


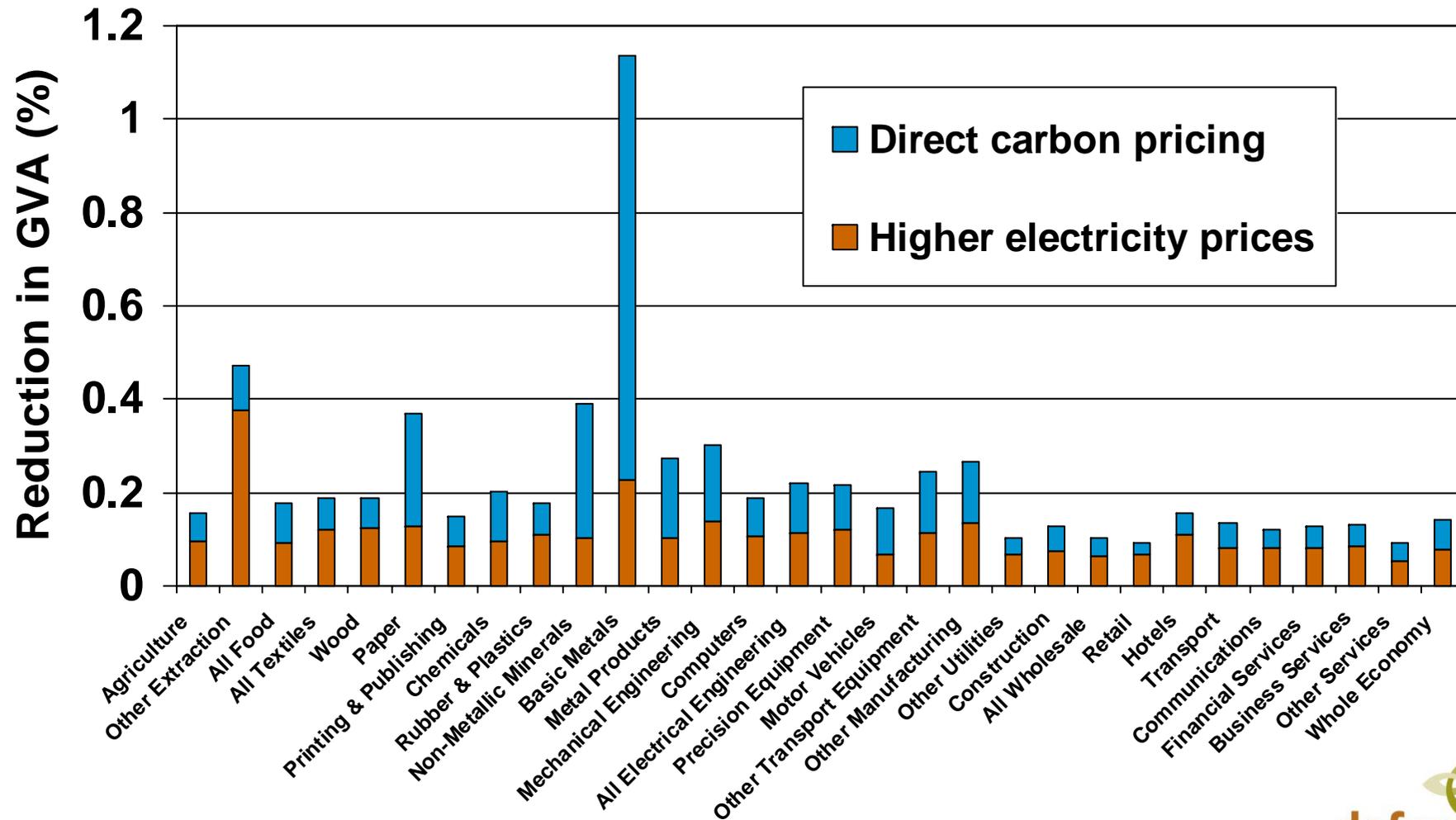
Figure 3 -Value at Stake for main industrial activities, relative to UK trade intensity from outside the EU, for €20/t CO₂.

The sectors most exposed to carbon leakage account for just over 1% of GDP



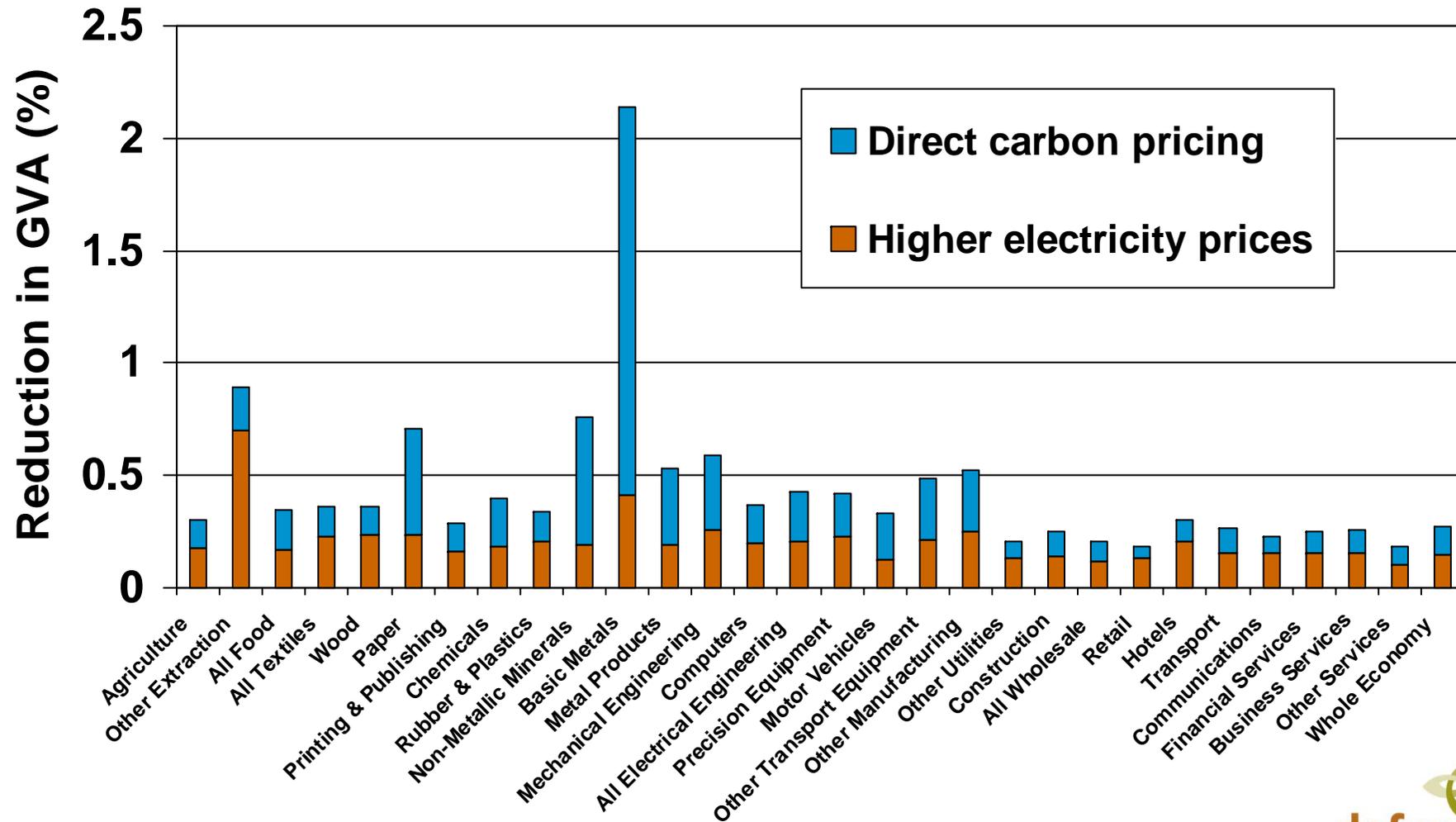
Price increase assumption: CO₂ = €20/t CO₂; Electricity = €10/MWh

Oxford Economics: Estimated impacts on competitiveness is small in most sectors at a carbon price of €25/tCO₂



Source: Oxford Economics

Oxford Economics: Estimated impacts on competitiveness <0.5% GVA in most sectors at a carbon price of €55/tCO₂



Source: Oxford Economics

Initial conclusions on carbon leakage

- ◆ Climate Strategies study shows that only a limited number of sectors are significantly affected.
- ◆ That study concluded that only iron & steel, aluminium, cement and lime are likely to be significantly affected.
- ◆ Deep dives into iron & steel, and cement show that there are important barriers to international competition and relocation that are likely to limit carbon leakage further.