

Identifying critical value chains in CO₂, energy, material, monetary and employment consumption-based accounts

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The majority of the UK's CO₂, energy and materials consumption-based account (CBA) can be accounted for by identifying the largest 100 value chains. It is logical to propose that emissions reduction and energy and material efficiency policies should focus on these most important supply chains. Different policy levers target different parts of the value chain, for example, reducing final, and or intermediate demand or improving the efficiency of industry. Ideally these policies, whilst reducing environmental impact, should preserve the socio-economic wellbeing of both the UK and her trading partners. This paper uses structural path techniques with a UK focussed multiregional input-output database to identify the most important environmental value chains. We then review policy levers that could reduce the UK's CO₂, energy and material CBA. Finally we refine the list of value chains to remove those which are critical to the economies and employment base of the UK and the rest of the world.