

# The headache of a headline: a case of data from thin air.

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On 10<sup>th</sup> August 2021, *The Guardian* ran an article with the headline “UK’s green economy four times larger than manufacturing sector, says report”.<sup>1</sup> Surprised by this impressive value, we picked up the article. However, the report cited did not contain this statistic, nor data from which it was derived.<sup>2</sup>

205.7 divided by 55.6 is only 3.70 rather than 4. Additionally...

The article claims:

“Today’s research shows that the **low carbon** sector is worth **£205.7bn** in the UK. Using the same methodology, kMatrix found the manufacturing sector is worth **£55.6bn** and the construction sector is worth **£132.9bn.**”

**Sarah Howard**  
of kMatrix  
(report authors)

“This data, by examining the full extent of the low carbon economy from the grassroots up, shows us just how important it already is for the UK economy and the progress already made.”

- The article uses the phrases ‘low carbon’ and ‘green economy’ several times interchangeably. This causes confusion because the source report defines ‘low carbon’ as a subset of the ‘Low Carbon and Environmental Goods and Services’ (LCEGS) sector, making up only 49% of the LCEGS valuation in 2020/21. The numbers used in the article appear to always relate to LCEGS, even when saying ‘low carbon’.
- The values given for the manufacturing and construction sectors do not appear in the report at all, nor were we able to find them in any other kMatrix publication listed in the report or on their website.
- The report methodology makes it clear that the LCEGS sector valuation also includes manufacturing and construction as ‘non-core/enabling’ activities. This suggests that double-counting may be occurring, with part of the manufacturing and construction valuation also appearing within LCEGS. Without a source for these values, we cannot know if this is the case.

## How large an effect might double-counting have?

### Objective

- ❖ To use available ONS data to estimate the proportion of sales valuation that may have been counted for both LCEGS and either manufacturing or construction.

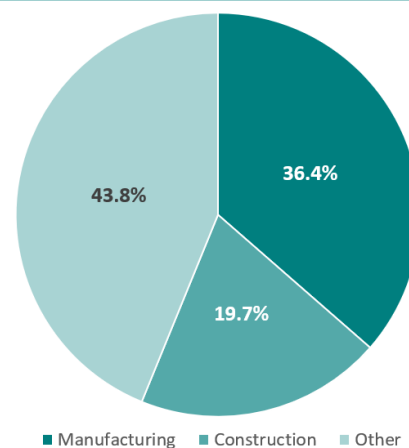
### Methods

- Source: Office of National Statistics data for 2019 (most recent) for Low Carbon and Renewable Energy Economy (LCREE), by sector.<sup>3</sup>
- Data: Proportion of LCREE turnover for all industries due to Manufacturing and Construction.

### Results

- ✓ ONS estimates suggest that 56.2% of turnover in LCREE industries is in manufacturing and construction.
- ✓ Removing this from the £205.7bn estimate would leave £90.2bn, only 1.62 times the manufacturing sector estimate.
- ✓ However, the ONS definition of LCREE is different from the kMatrix definition of LCEGS. This could result in either higher or lower proportions.

Estimated proportion of total LCREE turnover (%)



### Our thoughts:

- The headline claim is an **exaggeration**, even using the numbers in the article. Following our feedback, *The Guardian* amended the headline claim.
- The **manufacturing and construction values** used in the calculation are **not in the source report**.
- Based on the information given, **double-counting may have occurred**. ONS data suggests that the relative value **could drop from 3.70 to 1.62**. Following our feedback, *The Guardian* informed us that **additional detail was going to be added the kMatrix report** by the authors, which would address methodological concerns.
- The terms ‘low carbon’ and ‘green economy’ are **used interchangeably** and are **not defined**. The size of the ‘low carbon’ economy was estimated in the report at only £101.8bn rather than £205.7bn for total LCEGS. Waste incinerators, industrial air filtration, and odour control systems fall under LCEGS, but may not count as ‘low carbon’ industries in the mind of the reader.
- **Larger context** should have been given. The **proportion of the total economy** that falls under LCEGS and its **change over time** are not discussed.
- The relative growth of the LCEGS sector is only a good thing if it **reduces negative environmental impact**. This would not be the case if, for instance, renewable energy is just **adding to capacity**, or if the market for air pollution, noise, or sewage control reflects a necessary response to **mitigate continued degradation**.

1. Taylor, M and Ambrose (2021), J. UK’s green economy four times larger than manufacturing sector, says report. *The Guardian*, 10<sup>th</sup> August  
 2. kMatrix Data Services Ltd (2021). Low Carbon Environmental Goods and Services “Where we were, where we are, and where we’re going”.  
 3. Office of National Statistics (2021). Low carbon and renewable energy economy estimates. 20<sup>th</sup> May.