First steps in reporting Scope 3 emissions from procurement

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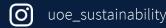


Aim for today

- To discuss whether the Higher Education Supply Chain Emission Tool (HESCET) is suitable for calculating & setting targets for Scope 3 emissions from procurement
- To establish which institutions are working to calculate detailed Scope 3
 emissions from their procurement, and how we might share knowledge on
 this topic
- **Not in-scope**: To examine HOW our institutes can reduce Scope 3 emissions from procurement











Background



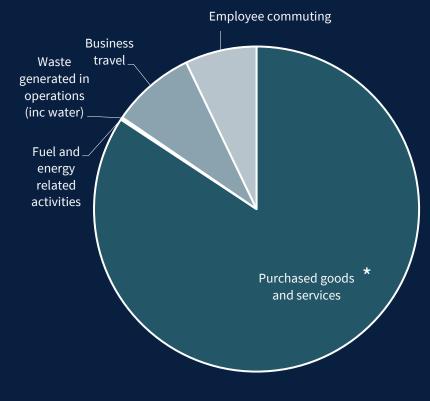






Measuring Scope 3 at the University

Carbon Emissions (t CO₂e)



^{*} Figure for "Purchased goods and services" based on the HESCET output.

Scope 3 Categories	Carbon Emissions (t CO2e)				
1. Purchased goods and services*	111,811 HESCET				
2. Capital goods	Not applicable				
3. Fuel and energy related activities	183 PBCCD reporting				
4. Upstream transportation and distribution	Not applicable				
5. Waste generated in operations (inc water)	155	PBCCD reporting			
6. Business travel	11,063	Business Travel Report			
7. Employee commuting	9,455	Bi-annual survey			
8. Upstream leased assets	Not applicable				
9. Downstream transportation and distribution	Not applicable				
10. Processing of sold products	Not applicable				
11. Use of sold products	Not applicable				
12. End-of-life treatment of sold products	Not applicable				
13. Downstream leased assets	Not applicable				
14. Franchises	Not applicable				
15. Investments	Project underway by Mercer (findings due in 2021-22)				











How we get our HESCET output

UoE procurement report spend to various consortia against PROC-HE codes

UKUPC pull data together

HESCET report generated

HESCET report available to UoE via APUC contract uptake portal (Reports > Scope 3)

*HESCET = Higher Education Supply Chain Emission Tool











HESCET Update (2021)

- Initial HESCET (2009) included 75 spend categories, updated HESCET increased this to 311
- Also increased the granularity to include regional emission data (rather than just UK)
- Made available to UK FHE in Feb 2021 & now formally owned by BUFGD & **HEPA**









Of note...

Scottish Government guidance on leadership role of public bodies (released 29 October, 2021)

"Most public bodies have not previously reported supply chain or capital emissions. Data and reporting in this area is not as mature as in other areas of emissions and it may take public bodies time to set up appropriate processes to allow for reporting in these areas.

Greenhouse gas reporting in these areas may be based on estimates, not actual measurement. While this means quantitative targets may not be able to be set, this will still allow organisations to identify potential hotspot areas and then prioritise actions against these areas."

https://www.gov.scot/publications/public-sector-leadership-global-climate-emergency/









UoE HESCET output

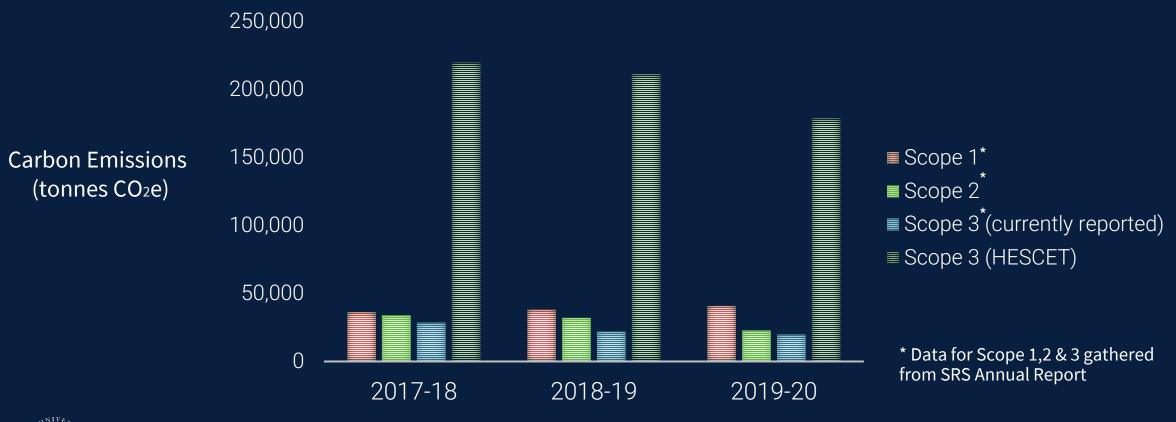








1. Scope 3 is likely to be a very big proportion of our emissions.





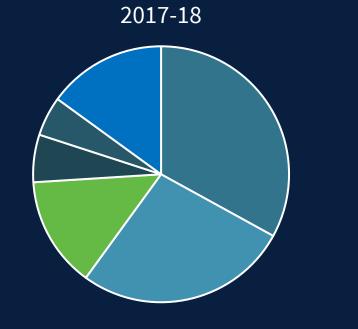








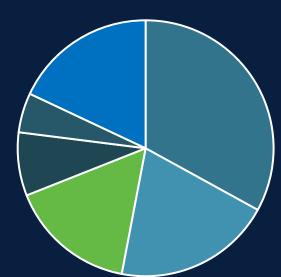
2. Our scope 3 is likely dominated by small number of key categories







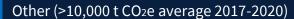
Computer Supplies & Services



2018-19









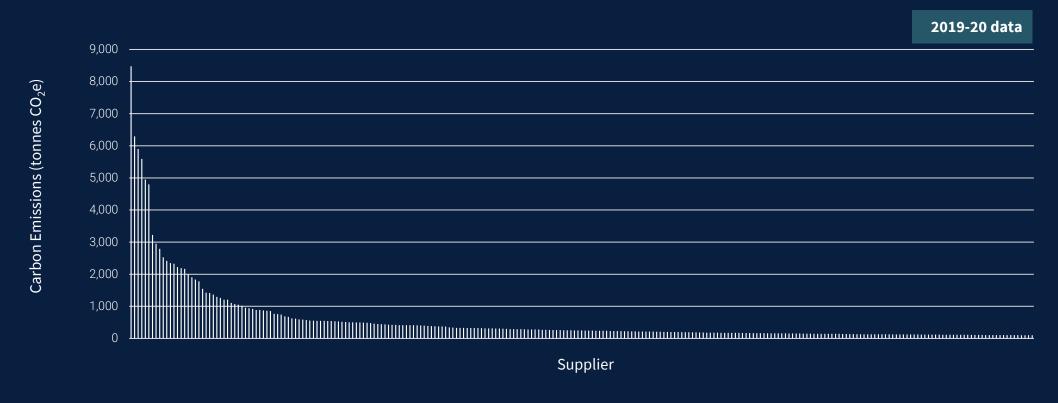






2019-20

3. Certain suppliers may be high priority



Suppliers with emissions under 100 t CO₂e are omitted from this graph to increase clarity.









4. Provides "HESA ready" values

HESA Category

Scope 1 and 2 Emissions - Onsite energy consumption

Business Travel

E3SCMPI - Medical and precision instruments

E3SCBS - Business services

E3SCCON - Construction

E3SCMP - Other manufactured products

E3SCICT - ICT

E3SCPP - Paper products

E3SCMFCG - Manufactured fuels, chemicals, and gases

E3SCWW - Waste and water

E3SCFC - Food and catering

E3SCUNC - Unclassified

E3SCOTH - Other procurement











1. Accuracy

Supplier level

Supplier Name	HESCET		Business Travel Report		
	Carbon Emissions (t CO2e)	% of total HESCET carbon	Carbon Emissions (t CO2e)	% of total HESCET carbon	
Lothian Buses	2,948	1.65%	25	0.01%	
Key Travel	2,406	1.35%	6,721	3.76%	
Central Radio Taxis	217	0.12%	46	0.03%	
William Hunter Luxury Coaches	956	0.53%	13	0.01%	

Category level

Data Source	Included within the data	Carbon Emissions (t CO ₂ e)			
		2017/18	2018/19	2019/20	Grand Total
HESCET HESA figures	Business travel & accommodation	10,573	13,731	9,696	34,000
HESCET Travel & Transport	Business travel & accommodation, subsistence	9,322	12,288	8,745	30,355
Estate Management Record (HESA)	Business Travel	13,668	18,466	11,062	43,196
Business travel report (procurement spend only)	Business travel (excluding expenses, credit card spend, EUSU)	8,217	13,353	7,001	28,571
Ecometrica Carbon Reporting	Business travel & Accommodation (nights)	18,281	18,767	10,960	48,008



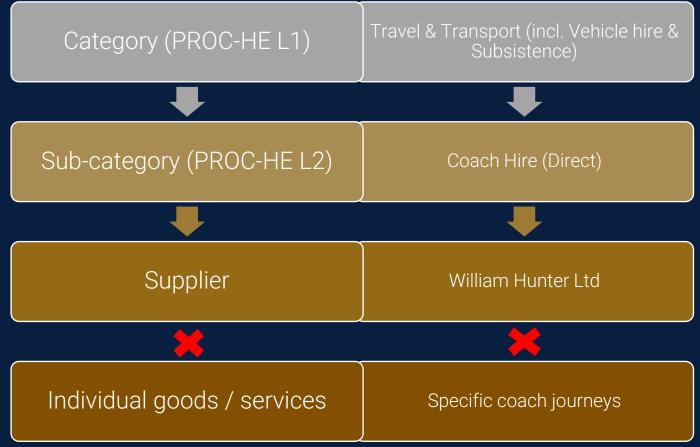








2. Level of detail













3. Potential cross-over with other scopes

Category

Laboratory/Animal House Supplies & Services

Estates & Buildings

Computer Supplies & Services

Utilities

Travel & Transport (incl. Vehicle hire & Subsistence)

Professional & Bought-in Services including consultancy

Medical, Surgical, Nursing, Dentistry Supplies & Services

Audio-Visual & Multimedia Supplies and Services

Catering Supplies & Services

Health & Safety & Security

Facilities Operations

Furniture, Furnishings & textiles







uoe_sustainability





4. Does not include *all* purchases

- Expenses
- University credit cards

BUT it is noted these are likely to be a very small amount of the overall spend (plus should be decreasing)









Conclusion on HESCET

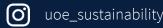
Benefits

- Good for giving "broad brush" view of Scope 3 carbon emissions from procurement
- Can drill down to supplier level to compare within categories & across categories
- Uses data that is already collected and processed
- Is comparable across the UK FHE sector (?)

Concerns

- Needs to be checked for crossover & accuracy prior to using for setting targets
- Needs further level (s) of detail to be able to enact and measure change accurately
- May not include *all* purchases











Further Research

To establish what is going on in the FHE sector and more broadly











According to the 2019-20 PBCCD...

"... 1% of reported carbon emissions were attributed to procurement..."

BUT

... only **one body included this metric as standard (**and only in broad terms), while a handful included accommodation linked to business travel.











A number of HE institutions are looking at this challenge

Including...

- Strathclyde & St Andrews (from PBCCD)
- Stanford (USA)
- Bath (UK)
- Pennsylvania (USA)
- Exeter (UK)











Other sectors

- Scottish Government
- BHP (mining)
- BT (tele / communication)
- Eastleigh Borough Council (local council, England)











Conclusion

HESCET can...

- offer broad brush analysis of spend data
- Show "hot spots" for further analysis, including specific suppliers
- offer comparisons to other institutions (if we're all using the same tool, in the same way)
- Fulfil the requirements of the PBCCD

BUT I think we can do better!











An ask (or two) from you

Are you working to understand Scope 3 emissions from your institutions procurement?

If so, are you interested in sharing knowledge / working together on this topic?











Questions?

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