**Updated Scope 3 Emission Data & HESCET – Context Information (Feb 2021 - UK)**

**Background**

For many years, the HESCET tool (using embedded DEFRA conversion factors, until now using conversion factors based on data around a decade ago) has been used to calculate the Scope 3 (supply chain) emission across UK HE. This tool was originally developed with funding from HEFCE with the data processing managed by the 6 UK regional purchasing consortia. The tool was owned and controlled by HEFCE, it then passed to the recently established (UK Gov) Office for Students (OfS). The tool has not been refreshed with updated carbon equivalent data for many years (as it was owned by HEFCE, the sector itself did not have the power to update it). With the brief of OfS being different to HEFCE, the tool was therefore passed recently to the ownership of HEPA - the Higher Education Procurement Association (part of the British Universities Finance Directors Group).

**Recent Activity**

HESA had stated / states that the submissions for climate data for the 2019/20 AY (deadline April 2021) should be based on the 2020 DEFRA (published March 2020) conversion factors so a joint group was formed by HEPA and EAUC (with representatives from HEPA, EAUC, and from procurement and sustainability teams in the sector across the UK, as well as reps from purchasing consortia) to update the HESCET tool.

The group worked directly with the team in the University of Leeds that are contracted to calculate the carbon factors on behalf of DEFRA so that they would be able to both gain a good understanding of how they work and be able to access the data as soon as it was available. The team at Leeds advised that substantial changes to the calculation methodology had recent been put in place that would significantly change, significantly increasing in most cases, the carbon equivalent figures being reported due to various aspects including:

* Previously there were 75 DEFRA codes, now there are 311, this is to provide a better granularity of emission data across commodities.
* Much more (then when the old factors were calculated) is understood about the impact of other gases (beyond carbon) such as methane in the role they play in climate changes so these impacts have been included.
* Previously the data was based on two global regions of source, the UK and the rest-of-the-World, the new factors break the World into 16 regions so that different emissions caused by production in the different regions can be more accurately accounted for.
* Due to most of the largest emission goods that HE buy (ICT, Furniture, Lab equipment, Lab consumables, various single use products, as well as steel used in construction) now being purchased from China (and India often in the case of steel), where virtually all electricity is generated from coal (versus higher levels of renewable energy being factored into the old rest-of-the-World region figures in past years), we were advised to expect huge increases in the carbon equivalent figures (but which are now much more accurate) for these commodities, versus the same spend calculated using previous versions of the HESCET tool / previous conversion factors, with some increases expected well in excess of 100%.

The HESCET tool can be a difficult tool to operate from a procurement perspective and challenging to examine more than one year of data at a time. APUC have an arrangement with the four English regional consortia to process their members annual spend data (LUPC and NWUPC from 18/19 data, SUPC and NEUPC from 19/20 data) where the institutions supply it. APUC working in partnership with HEPA & other UKUPC consortia, decided therefore to incorporate the DEFRA conversion factors (using exactly the same data as in the new HESCET tool) into their spend management system and make it available to institutions using the customer portal. This provides much more reportability of data, right down to supplier level, and will be a highly useful prioritisation tool.

For those institutions submitting 18/19 data to this tool (APUC, LUPC and NWUPC members), they will also have included in the reports the previous years’ spend reported against the new factors on a single view / worksheet to enable them to put the changes into context, as if people simply looked at the previous year’s HESCET data versus the recent year data, it would look like a huge increase in institutional emissions, whereas seeing the data in these new reports span a period that related to when reporting was under the old HESCET tool (but with the new conversion factors applied for the previous reporting period), allows year to year changes to be seen in the correct context, all using the new conversion factors. Institutions may then if they are reporting this data, can also refer back to their 18/19 HESCET data reports and explain the above and also explain that for example, x under the old HESCET tool is equal to Y in the latest report etc, but despite the higher figures does not necessarily mean there is an actual increase in institutional emissions.

**Looking Forward**

It is estimated that for HE/FE institutions, that out of their total climate emissions, depending on the institution’s activities, between 65% and 80% of its climate emissions will be Scope 3 / caused in their supply chains. These new conversion factors are bringing that into sharp focus.

Global supply chains are unlikely in the short to medium term, to move away from these high-coal based economies, and while consortia and procurement colleagues in institutions, working in partnership with key stakeholder user groups will work to maximise reductions strategies where possible, the most optimal way for the sector to materially reduce its climate impacts therefore is to re-evaluate how it consumes high emission goods and services.

This will include reducing demand (so for example where a research grant provides for new equipment, making a decision not to buy it if existing equipment will suffice for the purpose in hand), making equipment last longer, large scale refurbishment of equipment to extend life, and moving away from purchasing anything for single use unless it is a critical need and there is no re-usable alternative.