



2024

GUIDE TO THE APUC SCOPE 3 SUPPLY CHAIN EMISSIONS

TOOL

Helping the tertiary education sector report scope 3 supply chain emissions swiftly and simply.



Preface

The Guide to the APUC Scope 3 Supply Chain Emissions Reporting Tool has been created in collaboration with [Advanced Procurement for Universities and Colleges \(APUC\)](#).

The guide's objectives are to enable Scottish institutions and UKUPC-affiliated institutions to identify their scope 3 supply chain emissions* swiftly and simply. For Scottish institutions, the guide also supports your college or university to fulfil Scottish Government and SFC expectations within Public Bodies Climate Change Duties reporting.

The guide is of relevance to both sustainability and procurement leads within institutions.

The guide includes:

- A background to reporting scope 3 supply chain emissions, including details of Scottish Government and Scottish Funding Council expectations.
- An introduction to the APUC Scope 3 Supply Chain Emissions Tool, DEFRA Categories and Factors and differences between the APUC Tool and the HESCET Tool.
- User guide walkthrough of the APUC Scope 3 Supply Chain Emissions Tool, with further details of how to explore datasets in the appendix.
- Guidance on how to report scope 3 supply chain emissions within PBCCD returns to Scottish Government.
- FAQs and common troubleshooting.

*Definition: scope 3 supply chain emissions

Note that this guide refers specifically to 'scope 3 supply chain emissions'. The guide uses this term to refer to the emissions associated with the purchase of goods and services used by the college or university, which are not reported elsewhere within emissions reporting.

For example, whilst supply chain emissions in their entirety would include emissions associated with the purchase of energy, water supply and treatment, waste disposal and business travel, emissions from these sources are reported individually by institutions. Therefore, when reporting scope 3 supply chain emissions institutions should remove any emissions that are being reported elsewhere to avoid double-counting.

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Glossary of acronyms

APUC – Advanced Procurement for Universities and Colleges
BUFDG – British Universities Finance Directors Group
DEFRA – Department for Environment Food and Rural Affairs
EAUC – Environment Association of Universities and Colleges
EMR – Estates Management Record
HEPA – Higher Education Procurement Association
HESA – Higher Education Statistics Agency
HESCET Tool – Higher Education Supply Chain Emissions Tool
PBCCD – Public Bodies Climate Change Duties
SFC – Scottish Funding Council
UKUPC – UK Universities Purchasing Consortia

SECTION 1: Why report scope 3 supply chain emissions?

Key points:

- 1) Scottish colleges and universities must report their greenhouse gas emissions annually to the Scottish Government. This process is known as Public Bodies Climate Change Duties (PBCCD) Reporting.
- 2) Under the Scottish Government's public body guidance on [Public Sector Leadership on the Global Climate Emergency](#), colleges and universities must consistently, accurately and transparently report all Scope 1 and 2 emissions and all relevant and significant scope 3 emissions. Significant scope 3 emissions refer to emission sources that represent >1% of the total college or university emissions profile.
- 3) Scope 3 supply chain emissions are substantial scope 3 sources of emissions for all colleges and universities and therefore should be included in PBCCD reporting.
- 4) Reporting of scope 3 supply chain emissions to PBCCD also supports college and university [Outcome Agreement \(OA\) returns to the Scottish Funding Council](#) (SFC) on Priority Area 5: Net zero and environmental sustainability response.
- 5) There are multiple benefits to reporting these emissions beyond Scottish Government and Scottish Funding Council expectations, including: increased awareness of the links between procurement and sustainability; improved decision-making within procurement processes; and increased reputation for sustainability leadership.

Scottish Government Requirements

Statutory context

Scotland's colleges and universities are required to report their greenhouse gas emissions to the Scottish Government annually by 30th November. This is because public bodies that are listed in [Schedule 1 of the 'Climate Change \(Duties of Public Bodies; Reporting Requirements\) \(Scotland\) Order 2015'](#) as amended by the [Climate Change \(Duties of Public Bodies: Reporting Requirements\) \(Scotland\) Amendment Order 2020](#), are required to report annually on compliance with climate change duties established under [S44 of the Climate Change \(Scotland\) Act 2009](#) and in accordance with [Schedule 2](#) of the 2015 Order. This process, known as Public Bodies Climate Change Duties (PBCCD) reporting, has been mandatory since 2015/16.

You can find more information on PBCCD reporting and historical reports on the [Sustainable Scotland Network website](#) and sector-specific annual reports from [EAUC Scotland](#).

Non-statutory context

In October 2021, the Scottish Government published guidance on [Public Sector Leadership on the Global Climate Emergency](#). For a summary of how the guidance relates to the Scottish college and university sector see this [EAUC Scotland Briefing Paper and Video](#).

A key expectation within the guidance is:

“Public bodies must consistently, accurately and transparently report all Scope 1 & 2 emissions and all relevant and significant Scope 3 emissions.”

As a result, all institutions are asked to review their reporting boundary against the [GHG Protocol Corporate Value Chain Accounting Standard](#), to clearly understand which scope 3 categories are relevant to the institution and expand reporting accordingly. Over time institutions are expected to report scope 3 emissions as completely as possible. Significant additional sources of scope 3 emissions for the college and university are likely to include staff and student commuting, international and domestic student relocation travel and supply chains.

Whilst this is interim non-statutory guidance, the Scottish Government is currently in the process of developing updated statutory guidance based upon this latest guidance (public consultation expected spring 2024 with guidance being presented to Parliament March 2025).



Scottish Funding Council Expectations

The latest Scottish Funding Council (SFC) [Outcome Agreement \(OA\) Guidance for 2023-24](#) includes Priority Area 5: Net zero and environmental sustainability response (pages 6 and 7). Under this priority, there are two expectations from SFC that relate to college and university supply chains:

- 1) “We expect institutions to have or to put in place organisation-wide net-zero and sustainability plans by the end of the calendar year 2024 if these do not

already exist”. Organisation-wide approaches to sustainability should include procurement and supply chain engagement within plans.

- 2) “Institutions should provide the net zero target and commentary or data on progress in implementing a whole-institutional climate emergency response under each of the following key priorities...: estates and supply chains...”.

Including scope 3 supply chain emissions within PBCCD reporting can also be used to support the college or university net-zero and sustainability commentary, demonstrating a whole-institution approach to emissions reporting.

Co-benefits of reporting scope 3 supply chain emissions

In addition to meeting Scottish Government and Scottish Funding Council expectations of colleges and universities, reporting of scope 3 supply chain emissions can help facilitate other co-benefits to institutions. These include:

- Increased institutional awareness of the relationships between procurement, supply chains and sustainability - this can lead to behaviour change from users and purchasers and help open up new discussions on sustainability procurement.
- Improved decision-making within procurement processes - for example increased use of take-back schemes and refurbished goods within supply chains. This in turn can also shorten the overall supply chain, support more localised businesses and reduce procurement risk.
- Increased transparency – alongside improved decision making, including scope 3 supply chain emissions in your reporting builds trust amongst your staff, students and other stakeholders, demonstrating that you’re meeting your climate goals and commitments. Open access data about your greenhouse gas emissions also provides learners with opportunities to use that data for [living laboratory](#) projects and research, connecting the operational running of your institution with learning and teaching.
- Increased recognition of sustainability leadership - for example through the [Green Gown Awards UK and Ireland Money for Good](#) category.

SECTION 2: APUC Scope 3 Supply Chain Emissions Tool

This section provides an overview of the APUC Scope 3 Supply Chain Emissions Tool and the HESCET Tool.

The APUC Tool is freely available to all Scottish institutions and UKUPC-affiliated institutions. The HESCET Tool is freely available to all non-Scottish/non-UKUPC-affiliated institutions that are a member of HEPA or EAUC.

APUC member institutions can download their APUC Scope 3 Emission Reports from [Hunter](#). UKUPC-affiliated institutions outside of Scotland can download their Scope 3 Emissions Report from the [Contract Uptake: Supplier and Framework Agreement Management platform](#).

Non-Scottish/non-UKUPC-affiliated institutions can find the latest HESCET tool (v3.9) published on the [Higher Education Procurement Association \(HEPA\) website](#). HESCET is available to university and college HEPA and EAUC members.

Introduction

To calculate scope 3 supply chain emissions for monitoring and reporting purposes, institutions can utilise a spend-based tool created by HEPA RP Group (HESCET Tool) and/or the version further developed and improved by APUC (APUC Scope 3 Emissions Reporting Tool).

The methodology of both tools is simple: Spend against each Proc HE code is mapped to a defined list of DEFRA categories for which conversion factors - calculating value to carbon - are allocated. The tools are updated annually with the latest conversion factors to reflect information changes throughout the supply chains.

APUC member institutions can download their APUC Scope 3 Emission Reports from [Hunter](#). The report is automatically populated with the non-pay spend information (spend on goods and services) collated by APUC. For a manual use of the DEFRA factors against Proc HE spend, users can use the HESCET tool spreadsheet to input their data in manually.

Both the APUC Scope 3 tool and the HESCET tool will provide you with the figures required to populate your HESA 11 categories response.

APUC Scope 3 Emissions Reporting Tool

The APUC Scope 3 Emissions Tool provides an overview report showing a breakdown of carbon emissions per procurement category. The report allows a quick determination of the CO2e emissions associated with institutional procurement spend. Using the pivot table and charts within the spreadsheet, you can drill-down into each category to see more about the breakdown of calculated carbon emissions by individual supplier.

The report has already been populated with your institution's procurement data taken from the non-pay spend data you have provided to APUC.

Institutions use the report in a number of ways and the content will be useful to procurement, estates, and sustainability teams - the data may also be submitted as part of your Estates Management Report (EMR) returns.

APUC updates the report annually to ensure the most up-to-date [DEFRA conversion factors](#) are used. Institutional staff do not need to do anything to update the factors themselves. The tool's 'Cover' page provides information on any updates.

For information on the mapping of DEFRA categories against Proc HE codes, the current and previous DEFRA conversion factors and assistance in how to make the most of the information, please contact the [APUC Responsible Procurement Team](#).

Scope 3 Higher Education Supply Chain Emissions Tool (HESCET)

For the manual use of the tool, members can use the HESCET tool. The HEPA Responsible Procurement Group Scope 3 sub-group released an updated version of the Higher Education Supply Chain Emissions tool (HESCET) in December 2023.

[Version 3.9](#) updates the DEFRA conversion factors to most recent released version correct at time of guidance publication. This version is the latest iteration at time of the guide's publication. If you do use HESCET please check whether more recent versions have been launched.

The tool is now formally owned by HEPA / BUFDG and as such all updates to calculations are managed and controlled centrally.

Differences between the APUC Tool and the HESCET Tool

- The APUC tool allows more granular detail i.e. supplier level across multiple years.
- The HESCET tool is mainly a reporting tool for the present year, whereas the APUC tool allows comparison over multiple years.
- In the HESCET tool, users need to input the spend values manually (Tab 2: HE Input Sheet), making it more cumbersome and time consuming. The APUC tool is automatically populated. The HESCET tool might also be more confusing for non-Procurement team users.
- You can't look at supplier level detail in the HESCET tool.
- The HESCET Tool's Tab 5 (v.3.9): Results – 10 – categories align with the HESA categories.

DEFRA Categories and Factors

Historically, the conversion factors used had not been updated in the HESCET tool since 2009. Since then, the materials, methods of production and in some cases logistical methods of delivery have changed drastically. The now updated factors take these changes into account. In 2009, 75 categories were established by DEFRA to break down and map spend levels to in the calculation process; the number of categories has now increased to 311. Additionally, more geographical zones have been included (previously these were simply UK / EU / Rest of World). This allows the reports to be more nuanced and detailed.

It should be noted that the updated factors will have an impact on the information provided by the tool when compared to previous years' reports.

The data used to create the factors takes a long time to formulate and therefore data from 2018 is used to create the current factors for 2021. Researchers are always in catch up as they have to get the data from all around the world. So whilst it is based on 2018 information, this is processed to be used as the 2021 factors, as that is the year that they are released but the data is actually based on 2018 core data.

SECTION 3: APUC Scope 3 Emissions Tool – User Guide Walkthrough

Important information

This walkthrough is aimed primarily at procurement and sustainability professionals or equivalent colleagues who are new to reporting scope 3 supply chain emissions or would like a refresher in using the APUC Scope 3 Emissions Tool. Scottish Institution procurement professionals should use <https://www.hunterpcm.uk> to access their institutional 'Scope 3 Emissions Report'.

Whilst the focus of the guide is to support Scottish institutions with PBCCD reporting expectations, the walkthrough is also broadly relevant to other UK institutions who are part of the [UKUPC](#) Procurement consortia. The report can be found on the Contract Uptake: Supplier and Framework Agreement Management platform. Procurement professionals should use <https://cu.esolutions.org.uk/pages/login.php>.

The instructions with screenshots on how to access the report for UKUPC institutions (covering many English and Welsh institutions) is at the [end of this section](#).

Notes on APUC reporting timescales:

- The academic financial reporting year is from 1st August to 31st July. Check if your PBCCD reports align to this reporting year; if it doesn't, make sure to caveat the data within the PBCCD report using the comment cell, or change your reporting year to align with the academic financial one.
- Institution finance data is gathered between August and October and reports are normally issued from the beginning of October (in time for the 30th November PBCCD submission deadline). Communications are issued by APUC to procurement teams to make them aware that the data is available. Sometimes there are delays with the institution's procurement figures and clarifications need to be made before the report is issued.

Any questions:

- 1) First talk to your procurement team.
- 2) The procurement team can ask via the APUC help desk on the Hunter platform if they can't answer your question.
- 3) Or if the procurement team don't know, sustainability professionals can ask via the helpdesk: helpdesk@apuc-scot.ac.uk.

User Guide

STEP 1: Downloading your scope 3 emissions report (Scottish institutions)

Lead: Procurement team members

- 1.1. To access their scope 3 emissions report the institution's procurement team need to go to the Hunter Platform and log in with their institutional log in: www.hunterpcm.uk/login [Fig. 1a].
- 1.2. On the left-hand side menu, go to the reports sub-menu and click on 'Scope 3 Emissions Report' [Fig. 1b].
- 1.3. Follow onscreen instructions [Fig. 1c]. Download the report and click "Enable Editing". Clicking 'Enable Editing' downloads the raw data that's part of the report: if this isn't done, no raw data will be shown. Save the file locally.

Fig. 1a

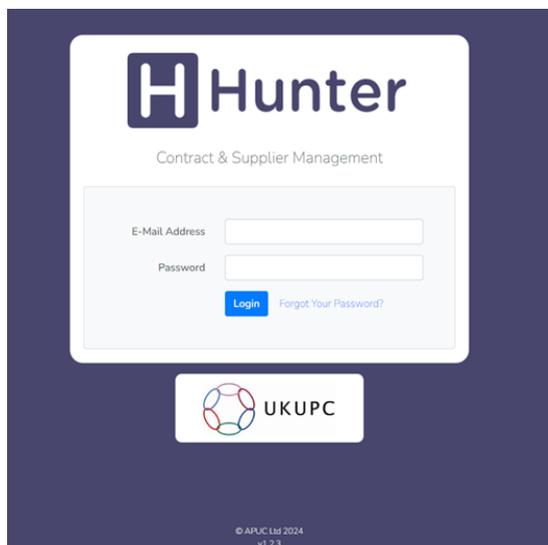


Fig. 1b

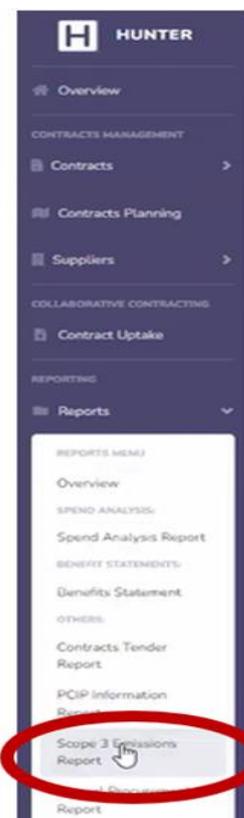


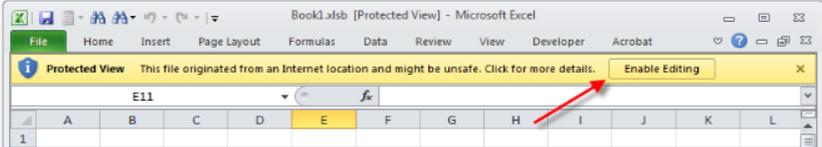
Fig. 1c

SCOPE 3 EMISSIONS REPORT [← Back](#)

The Scope 3 Emissions Report - overview report shows a breakdown of carbon emissions per procurement category.

Using the pivot table and charts within the spreadsheet, you can drill-down into each category to see more about the breakdown of calculated carbon emissions.

Please note that for the report to update with your latest figures, you **MUST** click the 'Enable Editing' button, as shown below. This will allow the latest spend data to pull through to the related pivot tables.



[Download Report](#)

SCOPE 3 EMISSIONS REPORT WAS LAST UPDATED: THU, JAN 25, 2024 11:22 AM

1.4. Continue to Step 2: Screening the data.

STEP 1: Downloading your scope 3 emissions report (UKUPC institutions)

Lead: Procurement team members

- 1.1. The 'Scope 3 Emissions Report' can be found on the Contract Uptake: Supplier and Framework Agreement Management platform [Fig. 1d]. This can be accessed by procurement leads via:
<https://cu.esolutions.org.uk/pages/login.php>
- 1.2. Within the portal select reports on the left-hand side [Fig. 1e].
- 1.3. Scroll down to click on and download 'Scope 3 Emissions Report' following the onscreen instructions and making sure to click "Enable Editing".
- 1.4. The rest of the steps are the same as for Scottish institutions. Continue to Step 2: Screening the data.

Fig. 1d

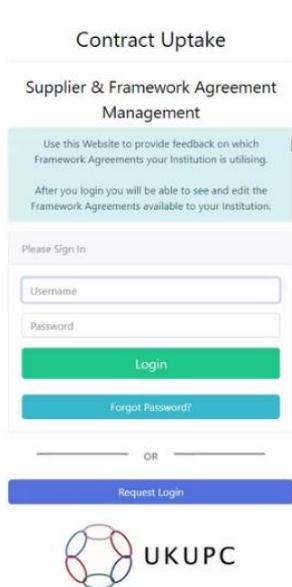
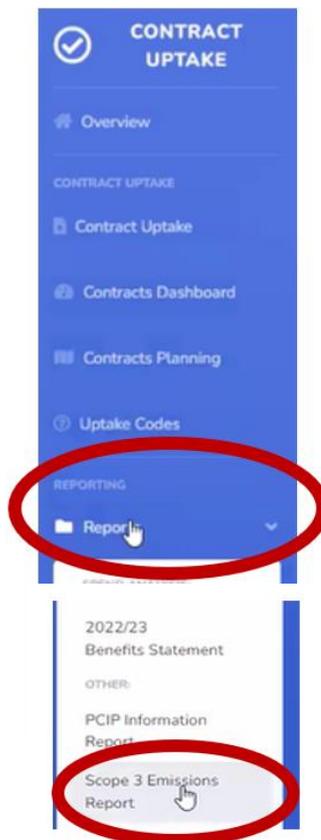


Fig. 1e



STEP 2: Screening the data

Leads: both procurement and sustainability leads should screen the report data together.

- 2.1. Open the report using Excel. There will be a range of tabs available at the bottom of the screen [Fig. 2a]. You can find a brief overview and functionality of each of the tabs in Appendix 1 of this guidance document.

Click on the fourth tab titled "Emissions Analysis"

Fig. 2a



- 2.2. It is important to ensure that emissions reported elsewhere within PBCCD submissions are removed from the scope 3 supply chain emissions figure. This is known as avoiding 'double counting'. Categories that likely need to be removed include metered utility use (natural gas, oil, electricity, purchased heat or steam, water supply and treatment), waste management and business travel. This is because there are more accurate ways to calculate emissions for these sources than estimates based on spend e.g. meter readings, supplier invoices, travel management company data on distance and mode of travel for staff business travel. See the sector's [Standardised Carbon Emissions Framework](#) for a reference sheet on emission data quality hierarchies for each emission source and best practice.

To remove double counted emission sources from the data you must first identify suppliers you want to hide within the report. Click on the + button next to each spend category (column A) to view sub-categories and suppliers. Highlight suppliers you want to hide [Fig. 2b].

Fig. 2b: in this example we are removing emissions from coach travel, purchased gas, and water supply and treatment.

Row Labels	2021/22	2022/23	Grand Total	Difference from previous year	% Difference from previous year
Sum of MTCO2	9922.996075	9884.241936	19807.23801		
Estates	9922.996075	9884.241936	19807.23801	▼38.75	▼0.4%
Core	9922.996075	9884.241936	19807.23801	▼38.75	▼0.4%
Catering Supplies & Services	375.1851647	375.5844889	750.7696536	▲4	▲0.1%
Estates & Buildings	1610.943893	1377.098531	2988.042425	▼233.85	▼14.5%
Facilities Operations	118.2101429	266.786939	384.997082	▲148.58	▲125.7%
Furniture, Furnishings & textiles	277.2523907	166.5327159	443.7851065	▼110.72	▼39.9%
Health & Safety & Security	70.0801202	54.6524645	124.7325847	▼15.43	▼22.0%
Janitorial & Domestic Supplies & Services	47.08900578	28.02850782	75.1175136	▼19.06	▼40.5%
Telecommunications	39.38142234	21.05330432	60.43472666	▼18.33	▼46.5%
Travel & Transport (incl. Vehicle hire & Subsistence)	88.3380409	59.92005	148.2580909	▼28.42	▼32.2%
Coach Hire (Direct)	88.3380409	59.92005	148.2580909	▼28.42	▼32.2%
Charlie Irons Coaches Ltd		29.6478	29.6478	▲29.65	—0.0%
AAA Coaches Ltd		20.71545	20.71545	▲20.72	—0.0%
Hunters Coach Hire	88.3380409	9.5568	97.8948409	▼78.78	▼89.2%
Utilities	7163.597873	7319.701596	14483.29947	▲156.1	▲2.2%
Mains Gas Supply and Services	3922.271676	4471.865284	8394.13696	▲549.59	▲14.0%
TotalEnergies	3922.271676	4465.987047	8388.258722	▲543.72	▲13.9%
Crown Gas and Power Limited		4.86468882	4.86468882	▲4.86	—0.0%
TotalEnergies Corbion		1.0135487	1.0135487	▲1.01	—0.0%
Water and Sewerage Services	43.33449337	48.6322254	91.96671877	▲5.3	▲12.2%
Lanes Group Plc	1.909999464	0.93342	2.843419464	▼98	▼51.1%
Scottish Water Business Stream	40.61309056	45.7089288	86.32201936	▲5.1	▲12.5%
ENWA Water Technology UK	0.384521778	0.338682	0.723203778	▼0.05	▼11.9%
Scottish Water		1.6511946	1.6511946	▲1.65	—0.0%

2.3. Once you have identified all suppliers to be hidden, click on cell C4 and then click on the header "PivotTable Analyze" followed by "Insert Slicer" [Fig 2c].

Fig. 2c

Row Labels	2021/22	2022/23	Grand Total	Difference from previous year	% Difference from previous year
Estates	9922.996075	9884.241936	19807.23801	▼38.75	▼0.4%
Core	9922.996075	9884.241936	19807.23801	▼38.75	▼0.4%

- 2.4. The Insert Slicers frame will appear. Tick "LocalSupplierName" [Fig 2d]. A new frame will appear. Right click on the edge of the slice frame and select "Slicer Settings..." [Fig. 2e]. Tick the box next to "Hide items with no data" and press OK [Fig. 2f].

Fig. 2d

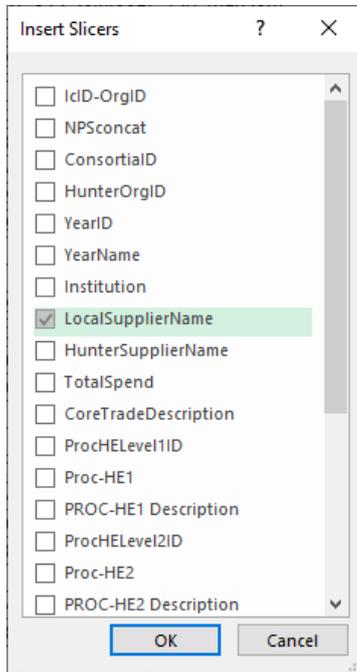


Fig. 2e

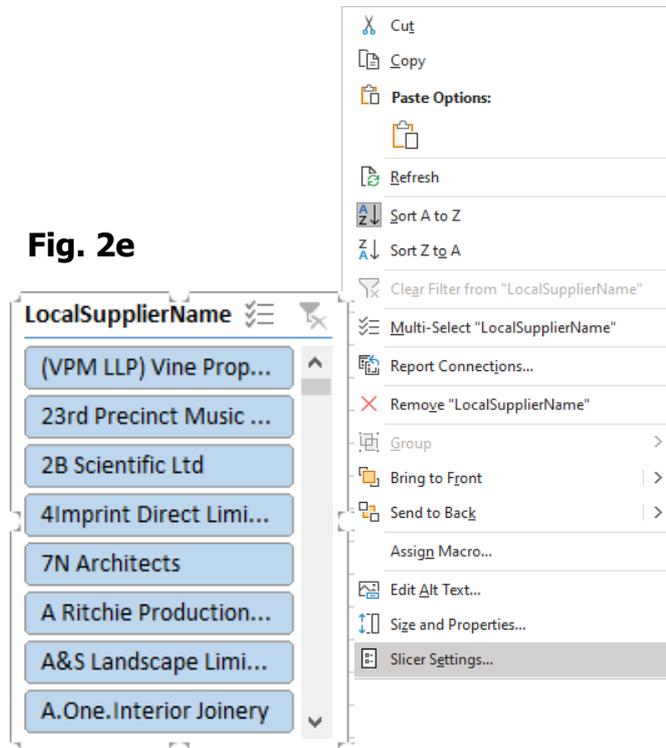
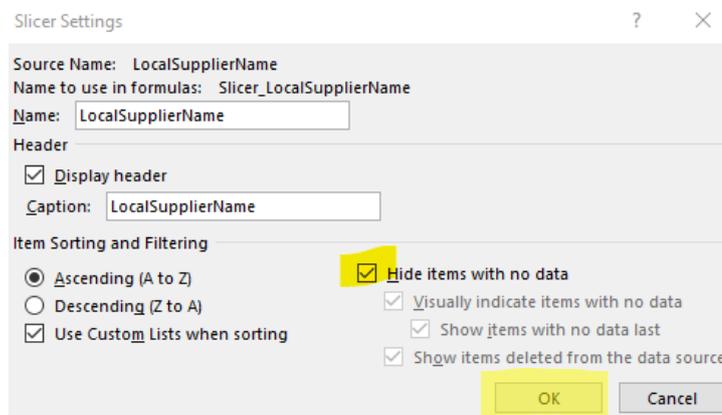


Fig. 2f



- 2.5. Click on the top selector icon in slicer to enable the deselect function [Fig. 2g]. Deselect any supplier you wish to remove from report. They will be shown in a lighter coloured background [Fig. 2h].

As you deselect specific suppliers they will automatically be hidden in the report, including their associated emissions. For example, in Fig. 2h we have deselected the supplier "TotalEnergies". TotalEnergies has now been removed from the table and this has reduced the grand total of reported scope 3 supply chain emissions by 4465 tonnes.

Fig. 2g

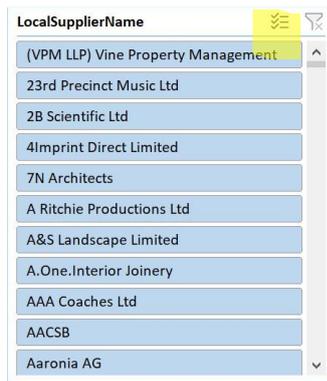


Fig. 2h

2	Sum of MTCO2	Column Labels	2021/22	2022/23	Grand Total	Difference from previous year	% Difference from previous year
3	Row Labels						
4	Estates		6000.7244	5418.254889	11418.97929	▼582.47	▼9.7%
5	Core		6000.7244	5418.254889	11418.97929	▼582.47	▼9.7%
6	Catering Supplies & Services		375.1851647	375.5844889	750.7696536	▲4	▲0.1%
7	Estates & Buildings		1610.943893	1377.098531	2988.042425	▼233.85	▼14.5%
8	Facilities Operations		118.2101429	266.786939	384.997082	▲148.58	▲125.7%
9	Furniture, Furnishings & textiles		277.2523907	166.5327159	443.7851065	▼110.72	▼39.9%
10	Health & Safety & Security		70.0801202	54.6524645	124.7325847	▼15.43	▼22.0%
11	Janitorial & Domestic Supplies & Services		47.08900578	28.02850782	75.1175136	▼19.06	▼40.5%
12	Telecommunications		39.38142234	21.05330432	60.43472666	▼18.38	▼46.5%
13	Travel & Transport (incl. Vehicle hire & Subsistence)		88.3380409	59.92005	148.2580909	▼28.41	▼32.2%
14	Coach Hire (Direct)		88.3380409	59.92005	148.2580909	▼28.41	▼32.2%
15	Charlie Irons Coaches Ltd			29.6478	29.6478	→0.00	→0.0%
16	AAA Coaches Ltd			20.71545	20.71545	→0.00	→0.0%
17	Hunters Coach Hire		88.3380409	9.5568	97.8948409	▼78.82	▼89.2%
18	Utilities		3241.326197	2853.714549	6095.040747	▼387.61	▼12.0%
19	Mains Gas Supply and Services			5.87823752	5.87823752	→0.00	→0.0%
20	Crown Gas and Power Limited			4.86468882	4.86468882	→0.00	→0.0%
21	TotalEnergies Corbion			1.0135487	1.0135487	→0.00	→0.0%
22	Water and Sewerage Services		43.33449337	48.6322254	91.96671877	▲5.29	▲12.2%
23	Lanes Group Plc		1.90999464	0.93342	2.843419464	▼1.01	▼51.1%
24	Scottish Water Business Stream		40.61309056	45.7089288	86.32201936	▲5.08	▲12.5%
25	ENWA Water Technology UK		0.384521778	0.338682	0.723203778	▼0.04	▼11.9%
26	Scottish Water			1.6511946	1.6511946	→0.00	→0.0%
27	East Coast Drainage Solutions Ltd		0.426881564		0.426881564	→0.00	→100.0%
28	Electricity Supply and Services		3197.009838	2746.989145	5943.998983	▼450.02	▼14.1%
29	Paragon Power Services Ltd			2.45165815	2.45165815	→0.00	→0.0%
30	EDF Energy 1 Ltd		3140.023326	2715.172634	5855.19596	▼424.85	▼13.5%
31	TESGL Ltd T/A SSE Enterprise Energy Solutions		56.98651198	29.3648536	86.35136558	▼27.62	▼48.5%
32	Renewable Energy (Fit,Rh) Equipment		0.98186604	0.239766	1.22163204	▼0.74	▼75.6%
33	Energy Institute		0.210210221	0.239766	0.449976221	▲0.03	▲14.1%

- 2.6. Once all relevant suppliers have been deselected to avoid double-counting, you can find your total scope 3 supply chain emissions value at the bottom of the table [Fig. 2i]. Make sure to use the latest years data. The emissions value can be used within PBCCD reporting (Scottish institutions only) and EMR

returns. Section 4 details how the value should be included within PBCCD reports.

Fig. 2i

The screenshot shows an Excel spreadsheet with a PivotTable. The PivotTable has columns for '2021/22', '2022/23', 'Grand Total', 'Difference from previous year', and '% Difference from previous year'. The 'Grand Total' for '2022/23' is highlighted in yellow and matches the value in the formula bar: 19995.3541795.

Row Labels	2021/22	2022/23	Grand Total	Difference from previous year	% Difference from previous year
Estates	5912.386359	5356.683645	11269.07	▼555.7	▼9.4%
Information Services	8449.609065	7499.458554	15949.06762	▼950.15	▼11.2%
Laboratories	1554.071832	1675.279817	3229.351649	▲121.21	▲7.8%
Non Influencable	464.2638539	1042.778652	1507.042506	▲578.51	▲124.6%
Professional Service - General	2883.058992	4093.873457	6976.932449	▲1210.81	▲42.0%
Professional Service - HR	442.3454012	327.2800545	769.6254557	▼115.07	▼26.0%
Grand Total	19705.7355	19995.35418	39701.08968	▲289.62	▲1.5%

SECTION 4: How to use the data

Reporting scope 3 supply chain emissions with PBCCD reporting

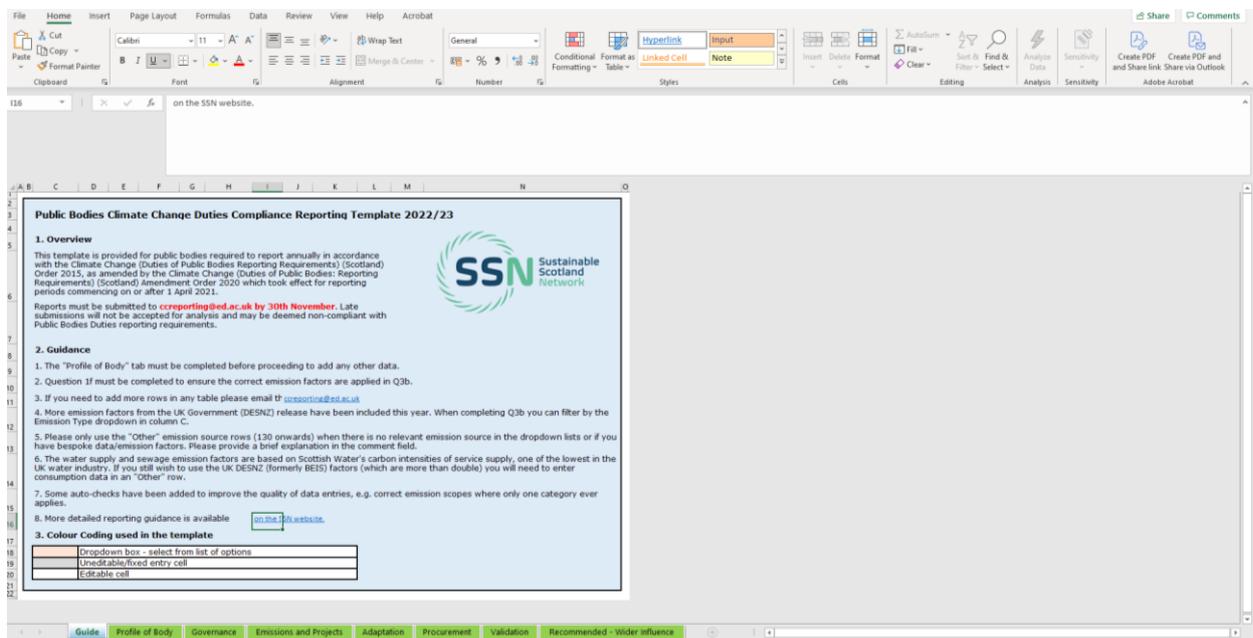
Lead: Sustainability lead

Colleges and universities should use the data gathered from the APUC Scope 3 Supply Chain Emissions Tool to include the emissions data within PBCCD reporting. The Sustainable Scotland Network (SSN) facilitates the PBCCD reporting process on behalf of the Scottish Government, with updated reporting templates made available in July for submission 30th November at the latest. You can find more information on PBCCD reporting, the latest report template and guidance, and historical reports on the [Sustainable Scotland Network \(SSN\) website](#).

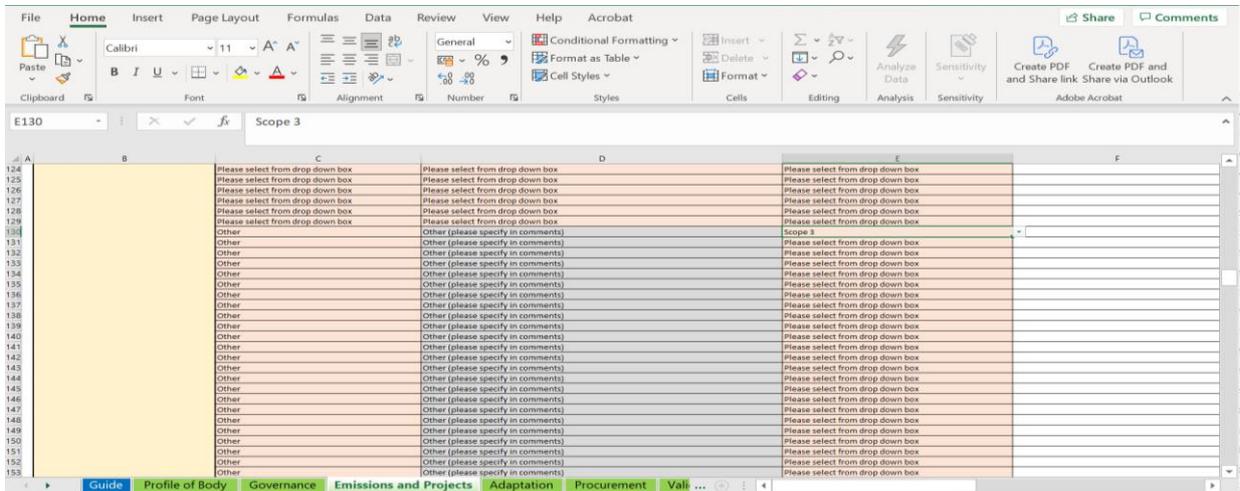
Note that the steps presented below use the 2022/23 reporting template and the template format could change in future reporting years. You can cross-reference the reporting template with SSN’s accompanying reporting guidance document in case of future updates.

Inputting the emissions data

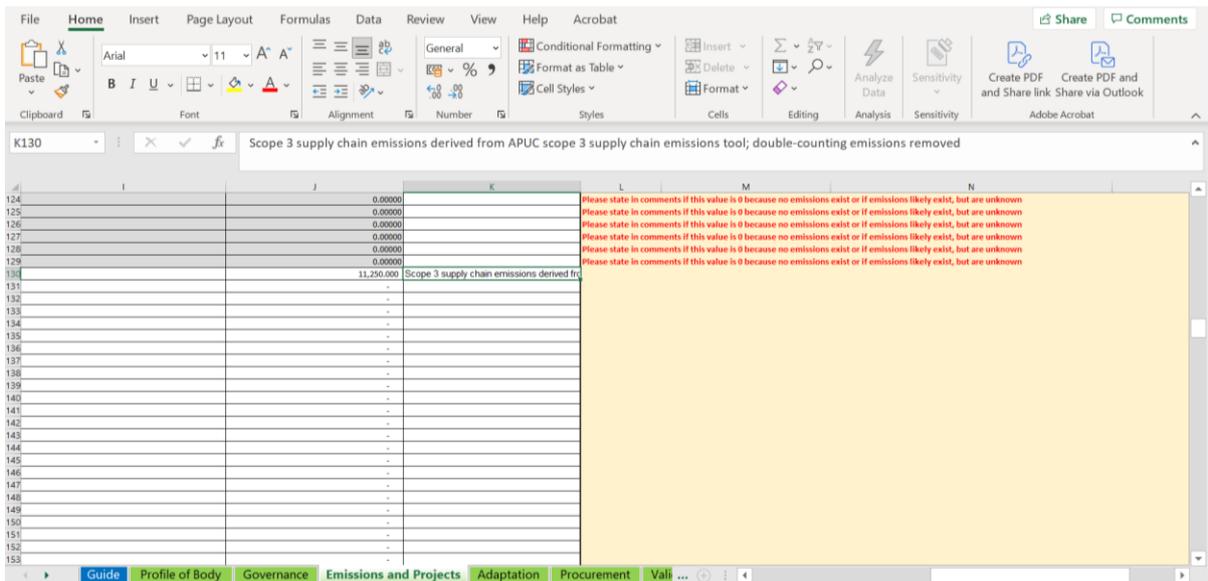
Step 1: Once the reporting template has been downloaded, institutional emissions are reported under tab 4 - “Emissions and Projects”. Click on the tab.



Step 2: When in the "Emissions and Project" tab. Scroll down to section 3b titled "Breakdown of emission sources". This is where the institution will report all its different emission sources and the amount of emissions for each one. Keep scrolling through section 3b until the column C of the table reads "Other". This is where you will report your scope 3 supply chain emissions.



Step 3: Track across the table to the cell in column E and select "Scope 3" from the drop-down box. Track across to the cell in column J and add the total scope 3 supply chain emissions figure here in tonnes CO2e. In the cell next to it, in column K, add supporting commentary. For example "Scope 3 supply chain emissions derived from APUC Scope 3 Supply Chain Emissions Tool; double-counting emissions removed".



Step 4: Once all institutional emission sources have been inputted, scroll up to table 3a titled "Emissions from the start of the year which the body uses as a baseline (for its carbon footprint) to the end of the report year". This table creates total emissions

for the institution over each reporting year as well as totals by scope 1, 2 and 3 emission categories. Make sure that the figure reported in Step 3 is included in the year's total scope 3 emissions and overall total. If you have reported scope 3 supply chain emissions for the first time, add a comment in the relevant box in column K stated "Expanded reporting boundary to include scope 3 supply chain emissions".

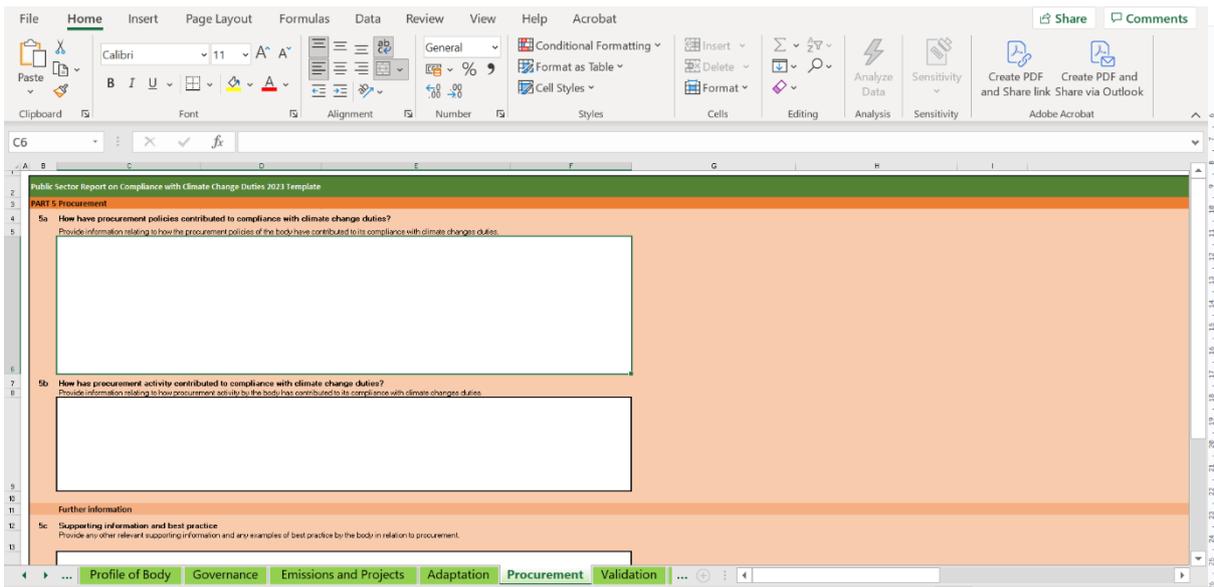
	Scope 2	Scope 3	Total	Units	Comments
11	1,500.00	2,000.00	4,500.00	RCO ₂ e	
12	1,400.00	2,100.00	4,480.00	RCO ₂ e	
13	1,200.00	3,800.00	5,192.00	RCO ₂ e	
14	1,100.00	3,000.00	3,090.00	RCO ₂ e	
15	1,000.00	2,700.00	4,688.00	RCO ₂ e	
16	900.00	4,800.00	6,660.00	RCO ₂ e	
17	800.00	6,000.00	7,770.00	RCO ₂ e	
18	700.00	15,000.00	16,680.00	RCO ₂ e	Expanded reporting boundary to include scope 3 supply chain emissions
19			-	RCO ₂ e	
20			-	RCO ₂ e	
21			-	RCO ₂ e	
22			-	RCO ₂ e	
23			-	RCO ₂ e	
24			-	RCO ₂ e	
25			-	RCO ₂ e	
26			-	RCO ₂ e	
27			-	RCO ₂ e	
28			-	RCO ₂ e	
29			-	RCO ₂ e	

Reporting wider sustainable procurement activities

Lead: Procurement lead

Under Tab 6 titled "Procurement" within the PBCCD reporting template there are three text sections for institutions to reference and link to relevant strategic documents and describe sustainable procurement activities. Note that it is not sufficient to only state a policy or strategy exists or that the body complies with the Sustainable Procurement Duty. Colleges and universities are expected to pull out the relevant key policy objectives and provide evidence of how these objectives are being delivered. We recommend that this section is written by procurement teams.

Given the spend-based method for calculating scope 3 supply chain emissions, it is unlikely institutions can evidence specific emission reductions from supply chains unless there is a notable reduction in spend. Instead, qualitative descriptions of sustainable procurement activities are expected. See [SSN's reporting guidance](#) for more information.



FAQs and common troubleshooting

1) We've reported our scope 3 supply chain emissions and our total emissions have sky-rocketed. Is that right? What should we do?

This is a common response for any institution reporting scope 3 supply chain emissions for the first time. In November 2023, 8 colleges and 8 universities reported these emissions through their PBCCD reporting to the Scottish Government. Scope 3 supply chain emissions accounted for between 30-75% of total reported emissions for these institutions in that reporting year. So if you're seeing a substantial increase in your overall reported emissions, you're on the right track! Do double check though that the emissions figure for scope 3 supply chains does not include any emissions reported elsewhere.

Now that you've got your emission figure, make sure to include it in PBCCD and internal reporting. As noted in Section 1, a key expectation within the Scottish Government's [Public Sector Leadership on the Global Climate Emergency](#) guidance is:

"Public bodies must consistently, accurately and transparently report all Scope 1 and 2 emissions and all relevant and significant Scope 3 emissions."

The Scottish Government understands that by meeting these expectations college and university scope 3 and total reported emissions will increase significantly. Therefore seeing an increase in reported emissions is not a barrier to reporting these emission sources.

2) The APUC Scope 3 Supply Chain Emissions Tool and HESCET Tool use a spend-based model for calculating emissions. Isn't that unreliable?

The APUC tool and HESCET Tool both use UK Government spend-based conversion factors to calculate scope 3 supply chain emissions. For example, for every £1,000 spent on IT equipment, X tonnes of emissions are produced. This is a blunt method for calculating emissions for two main reasons:

- a) The emission intensity of a product or service can vary greatly between suppliers (e.g. one supplier might power its manufacturing site using onsite wind turbines and solar PV, compared to another that draws power from a fossil-fuel powered grid system). The government conversion factors produce conversion factors for whole commodity categories and do not provide supplier granularity.

- b) The method hides that sustainable and/or energy efficient goods and services often have greater upfront costs compared to less sustainable options. Because the method calculates emissions purely based on spend, making sustainable procurement decisions may inadvertently increase the overall emissions figure provided by the APUC tool and HESCET.

Whilst using generalised spend-based methods for calculating scope 3 supply chain emissions has significant caveats, these are understood by the Scottish Government and again these drawbacks should not be seen as a barrier for reporting. Within the Scottish Government's [Public Sector Leadership on the Global Climate Emergency](#) guidance, pages 29 and 30 highlight the main scope 3 emission categories and the expected data maturity for each. For "Purchased goods and services" they expect emissions to be calculated using industry norms, estimated factors and spend data and have a red or amber data maturity rating.

3) How can we improve procurement decision-making based on the APUC Scope 3 Supply Chain Emissions Tool data?

One of the first benefits to reporting your institution's scope 3 supply chain emissions is that it can prompt more contextualised discussions and actions.

The procurement process has a huge role in the overall sustainability - and unsustainability - of an institution. Through reporting scope 3 supply chain emissions, sustainability committees can better appreciate the sustainability impact of procurement decisions and facilitate wider-internal discussions surrounding:

- Whether there is the need to procure goods and services from the outset;
- If there is, are there alternative routes to acquiring these good and services than buying new? For example, could goods and services that are redundant or not being fully utilised within an institution be moved to an area of greater need? Can goods be upgraded or repaired first rather than buying new?
- If buying new goods and services is the only option, can the institution take advantage of take-back services for future repair and responsible waste management? Can the institution embed requirements on minimum energy efficiency of procured goods?

These discussions may result in positive financial and sustainability outcomes for institutions.

4) Are there other tools available for calculating scope 3 supply chain emissions?

This is a rapidly developing field and further tools are being developed by various organisations to develop more granular data based on activity rather than spend but it's currently uncertain as to the scope, scale and availability of such tools.

Appendix 1: Excel tab overview

This section gives a detailed overview of what each tab does in the APUC tool. Depending on your aims, some may be surplus to your requirements.

Tab 1: Cover sheet: on the cover sheet there is an overview of what has changed in the versions over time, how it has been updated and a link to relevant UK Government pages from which APUC tool draws data.

Tab 2: Dashboard: this tab is a dashboard of core spend data. Core spend is what an institution spends on goods and services in different years i.e. things that they would be invoiced for by suppliers.

Tab 3: Spend Analysis: this tab shows how much has been spent in each of the spend categories over the last two years and whether there has been an increase or decrease on the previous year [Fig. 3a]. You can get further information on sub-categories by pressing the 'plus' sign to the left of the main category [Fig. 3b].

Fig. 3a

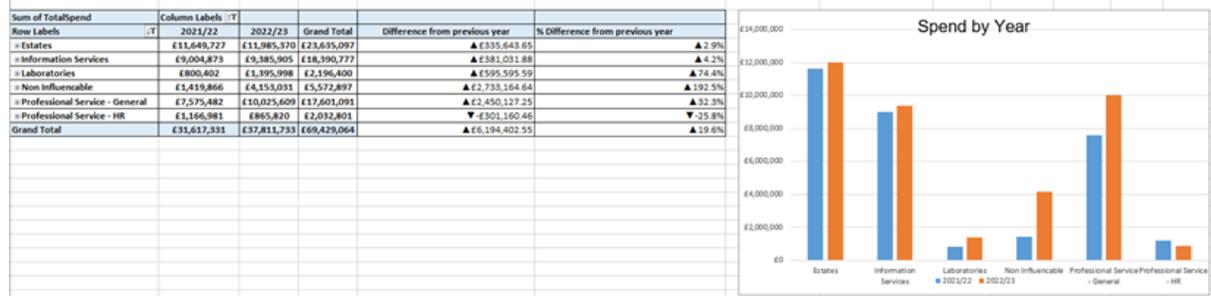
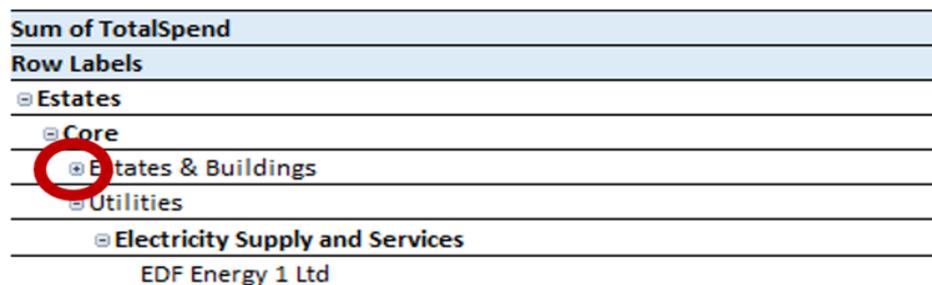
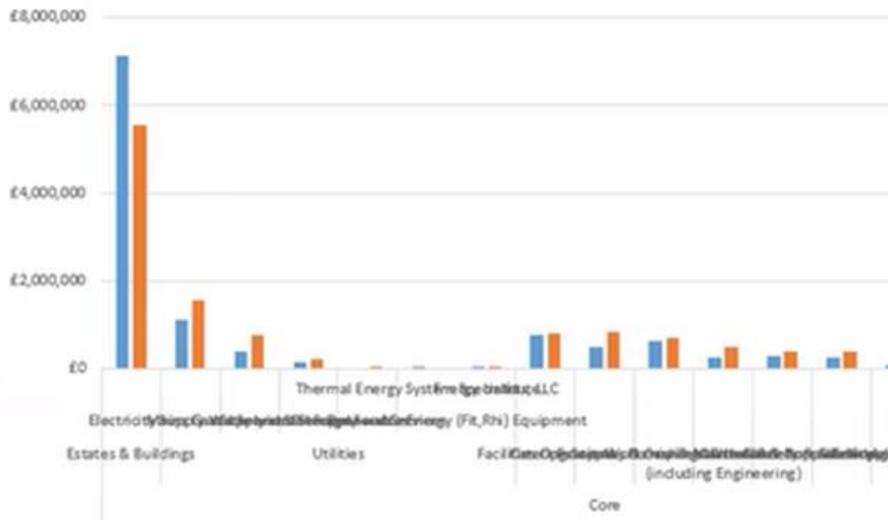


Fig. 3b



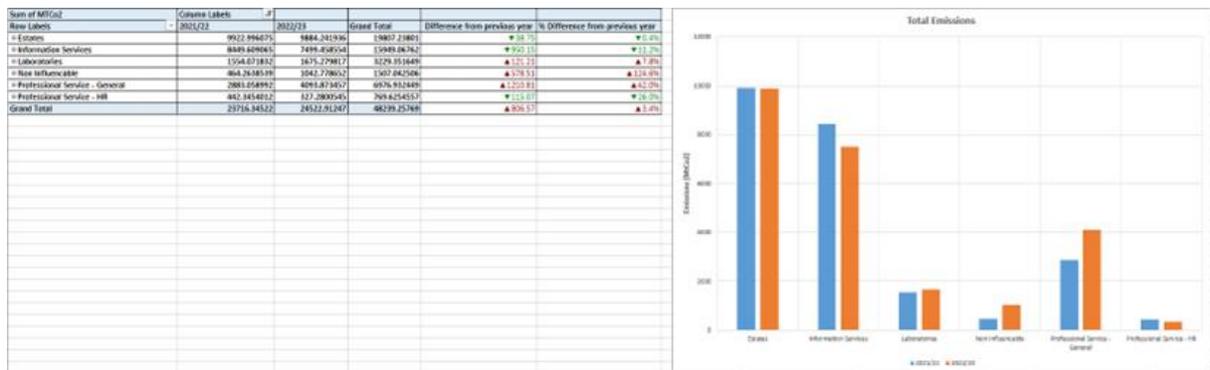
The graph generated when expanding to individual suppliers might become nonsensical [Fig. 3c]. Ignore this and just look at the table numbers.

Fig. 3c



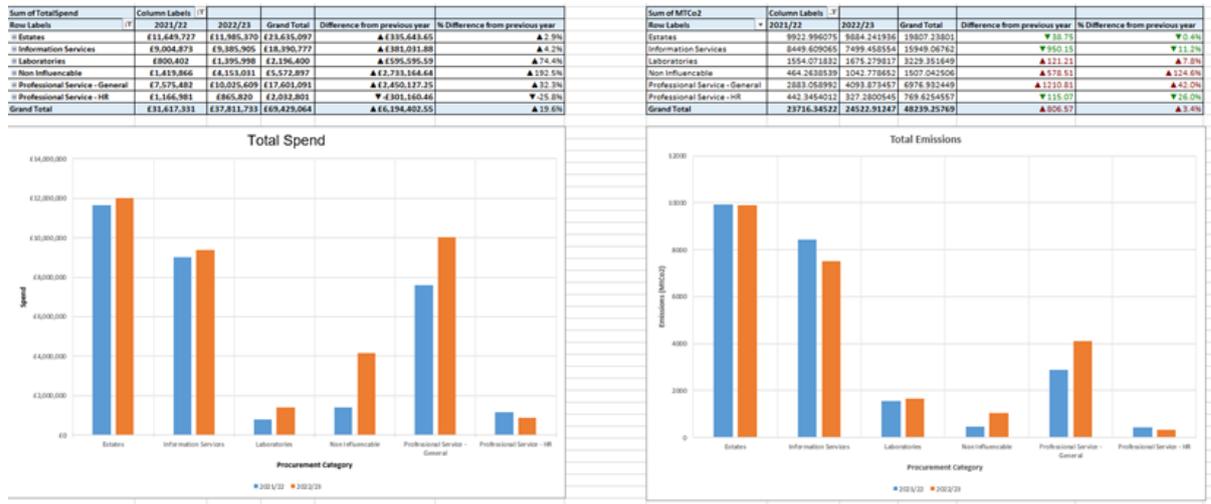
Tab 4: Emissions Analysis: this tab has a very similar format to Tab 2, but with emissions information. You can see by each category whether emissions have increased or decreased on the previous year [Fig. 3d]. If you want to drill down into the data, you can expand the data to view to supplier level by pressing the 'plus' sign.

Fig. 3d



Tab 5: Spend and Emissions Summary: this tab is a repeat of the previous two tabs (Tab 3 Spend Analysis and Tab 4 Emissions Analysis) to show the information on one sheet [Fig. 3e].

Fig. 3e



Tab 6: Proc HE1 Summary: this tab allows you to see how much has been spent and the metric tons of carbon associated with that spend based on the Proc HE level one categorisation (a very high-level categorisation). You can see where the highest emissions are coming from (directly linking percentage of spend to percentage of carbon).

For example, from our example institution 'AuchterMughty University' 26% of core spend is on Professional and Bought in Services including consultancy, but only makes up 15% of emissions [Fig. 3f; highlighted cells].

Fig. 3f

Proc-HE1	PROC-HE1 Description	Sum of TotalSpend	Sum of TotalSpend2	Sum of MTCO2	Sum of MTCO2_2
A	Audio-Visual & Multimedia Supplies and Services	£1,158,540.19	3.06%	422.56	1.72%
B	Library & Publications	£785,238.47	2.08%	157.86	0.64%
C	Catering Supplies & Services	£837,213.24	2.21%	375.58	1.53%
D	Medical, Surgical, Nursing, Dentistry Supplies & Services	£125,532.85	0.33%	153.49	0.63%
E	Agricultural/Fisheries/Forestry/Horticultural/Oceanographic Supplies & Services	£39,268.86	0.10%	15.02	0.06%
F	Furniture, Furnishings & textiles	£699,901.63	1.85%	166.53	0.68%
G	Sports Science, and Recreation	£26,679.34	0.07%	31.66	0.13%
H	Janitorial & Domestic Supplies & Services	£389,742.68	1.03%	28.03	0.11%
J	Utilities	£2,560,241.38	6.77%	7319.70	29.85%
K	Computer Supplies & Services	£6,772,096.67	17.91%	6835.73	27.87%
L	Laboratory/Animal House Supplies & Services	£1,270,265.16	3.36%	1521.54	6.20%
M	Workshop & Maintenance Supplies (including Engineering)	£507,902.45	1.34%	60.23	0.25%
N	Museums and Art	£6,767.50	0.02%	1.89	0.01%
P	Printing, Reprographics and Photocopying	£322,602.71	0.85%	32.97	0.13%
Q	Telecommunications	£289,435.72	0.77%	56.00	0.23%
R	Professional & Bought-in Services including consultancy	£9,912,143.04	26.21%	3663.29	14.94%
S	Stationery & Office Supplies	£149,369.45	0.40%	15.13	0.06%
T	Travel & Transport (incl. Vehicle hire & Subsistence)	£1,082,923.90	2.86%	812.52	3.31%
U	Health & Safety & Security	£459,327.15	1.21%	76.59	0.31%
V	Vehicles, Fleet Management (Purchase, Lease, Contract Hire)	£82,426.26	0.22%	139.89	0.57%
W	Estates & Buildings	£5,557,498.32	14.70%	1377.10	5.62%

Tab 7: Proc HE2 Summary: this tab goes into in more detail than Proc HE1.

Tab 8: Suppliers Spend: in this tab you can view spend with suppliers over multiple years.

Tab 9: Suppliers Carbon: in this tab you can view the carbon emissions related to suppliers in absolute terms (MtCO2e) and the percentage of carbon relative to the rest of the spend [Fig. 3g]

Fig. 3g

LocalSupplierName	PROC-HE2 Description	YearName	Values
		2022/23	
		Sum of MTCO2	Sum of MTCO2_2
TotalEnergies	Mains Gas Supply and Services	4465.987047	18.21%
EDF Energy 1 Ltd	Electricity Supply and Services	2715.172634	11.07%
Phoenix Software Ltd	IT Software including Bespoke Licences Maintenance	2181.747343	8.90%
Credit Card Spend - Barclaycard	Credit Card Charges	710.2952169	2.90%
Key Travel Ltd	Travel Agency Services	668.3991623	2.73%
Tribal Education Ltd	IT Software including Bespoke Licences Maintenance	487.9406362	1.99%
Jones Lang LaSalle/ AMAS Ltd	Building Related Professional Services	414.7859507	1.69%
Hewlett Packard Inc UK Ltd	Desktop, Laptop, Tablet Purchase inc. Apple	403.2597126	1.64%
Academia Ltd	IT Software including Bespoke Licences Maintenance	377.6122926	1.54%
Ex Libris UK Ltd	IT Software including Bespoke Licences Maintenance	328.196763	1.34%

Tab 10: HESA Scope 3 Figures: this tab is a summary page for HESA (Higher Education Standards Authority) scope 3 figures. HESA are responsible for the Estates Management Record (EMR) – which includes carbon/environmental data reporting. EMR returns are compulsory in Scotland and Wales and voluntary in England and Northern Ireland (although the majority of institutions do submit).

Scope 1, 2 and Business Travel are split out, so they can be removed to ensure you report these through more accurate data sources and/or to remove double counting (see [section 3, step 2](#)). These can be removed by unchecking the filters. Click the filter button in the red circle [Fig. 3h]. Uncheck the boxes for Scope 1 and 2 emissions and Business travel [Fig. 3i; shown in yellow highlighter].

Fig. 3h

35	Metric Tonnes Co2	Column Labels							
36	Row Labels	7/18	18/19 FY	19/20 FY	20/21 FY	21/22 FY	22/23 FY	Grand Total	R
37	Scope 1 and 2 Emissions - Onsite energy consumption	5898.29	6015.41	5751.57	3980.88	7135.68	7313.85	36095.69	
38	Business Travel	139.49	696.75	596.74	15.73	275.11	898.03	2621.85	
39	E3SCMPI - Medical and precision instruments	739.78	1013.89	547.73	752.36	1503.11	1669.93	6226.80	
40	E3SCBS - Business services	3233.47	3077.90	3722.10	2791.10	5168.56	5240.83	23233.95	
41	E3SCCON - Construction	559.81	266.11	365.34	442.81	496.27	135.08	2265.43	

Fig. 3i

Row Labels	Column Labels
E3SCMPI - Medical and precision instruments	739.78
E3SCBS - Business services	3233.47
E3SCCON - Construction	559.81
E3SCMP - Other manufactured products	676.22
E3SCICT - ICT	6600.06
E3SCPP - Paper products	240.44
E3SCMFCG - Manufactured fuels, chemicals, and gases	1.71
E3SCWW - Waste and water	143.50
E3SCFC - Food and catering	518.05
E3SCUNC - Unclassified	1.61
E3SCOTH - Other procurement	77.01
Grand Total	12791.67

For advanced Excel users:

Advanced users can access the raw data behind the spreadsheet by double clicking the 'grand total' figure on the bottom right corner of Tab 10: HESA Scope 3 Figures [Fig. 3j; shown in yellow highlighter).

Fig. 3j

Sum of TotalSpend	Column Labels	17/18	18/19 FY	19/20 FY	20/21 FY	21/22 FY	22/23 FY	Grand Total
E3SCMPI - Medical and precision instruments		£286,586.66	£392,772.59	£212,186.18	£361,648.94	£771,244.71	£1,392,438.32	£3,416,877.39
E3SCBS - Business services		£8,214,269.40	£7,614,229.60	£9,251,664.17	£10,512,993.32	£15,101,590.72	£16,040,492.84	£66,735,240.04
E3SCCON - Construction		£2,001,170.05	£900,230.30	£1,087,570.77	£1,771,792.38	£2,338,406.28	£1,010,205.46	£9,109,375.22
E3SCMP - Other manufactured products		£2,014,783.13	£1,899,231.34	£818,206.31	£1,298,230.53	£1,917,758.83	£2,220,145.02	£10,168,355.14
E3SCICT - ICT		£3,918,956.04	£4,064,606.30	£4,166,494.60	£6,282,961.92	£6,759,984.90	£7,544,506.69	£32,737,510.45
E3SCPP - Paper products		£879,876.94	£855,903.21	£923,787.88	£869,718.13	£918,210.36	£965,091.29	£5,412,587.81
E3SCMFCG - Manufactured fuels, chemicals, and gases		£3,407.98	£3,608.03	£48,552.66	£99,386.17	£41,640.00	£320.46	£196,915.30
E3SCWW - Waste and water		£368,177.03	£250,241.42	£92,983.70	£277,730.47	£257,253.26	£317,876.61	£1,564,262.49
E3SCFC - Food and catering		£930,714.76	£837,636.57	£512,871.18	£172,287.61	£311,417.13	£710,344.90	£3,475,272.15
E3SCUNC - Unclassified		£4,240.23	£10,602.84	£3,301.90	£11,550.38	£23,150.16	£16,204.30	£69,049.81
E3SCOTH - Other procurement		£5,306,516.00	£3,806,516.34	£2,671,773.24	£2,101,616.43	£1,310,299.91	£4,123,883.40	£19,320,605.32
Grand Total		£23,928,698.22	£20,635,578.53	£19,789,392.58	£23,759,916.27	£29,750,956.25	£34,341,509.28	£152,206,051.12

This raw data can then be formulated into bespoke formats, for example with the use of pivot tables. One example could include comparing emissions from micro, small, medium and large businesses and large businesses: (Note: 'blank' means they don't have a business size status recorded but likely fall into "SME"). We won't go into more detail in this guide, but you could ask for further training on this via your IT Team, Procurement Team or there are tutorials online on how to create pivot tables for detailed analysis.

Fig. 3k: example pivot table, comparing the type of business to the sum of MtCO2e over several years:

Sum of MTCO2	Column Labels						(blank)	Grand Total
Row Labels	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23		
(Blank)	286.2681096	237.3586183	402.6116109	398.5171132	689.9389742	863.232576		2877.927002
Charities						0.1134		0.1134
Large	4276.136488	4161.445116	2975.298427	4268.257157	4291.701481	4730.570603		24703.40927
Medium	4581.29729	4481.964149	5487.812516	3677.32411	6921.044818	6908.450789		32057.89367
Micro	483.452178	590.4698752	810.6792338	524.0797641	905.8512548	1139.738821		4454.271127
Small	3158.244477	3083.457322	2900.607219	2550.801082	3497.016368	2667.699024		17857.82549
Supported Service	6.271219443		11.10879117	0.296214788		1.23428745		18.91051285
(blank)								
Grand Total	12791.66976	12554.69508	12588.1178	11419.27544	16305.5529	16311.0395		81970.35048

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Contact us

Do you have a scope 3 supply chain emissions case study from your institution? Would you like it included in this guide? Share it with EAUC Scotland via scotland@eauc.org.uk.

Found a broken link or a gap in information? This guide was published in January 2024 and will be reviewed on a regular basis. Please email us about any errors or omissions.

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