

The cost of Net Zero

Outcomes from a project exploring the costs of Net Zero for Higher and Further Education in the United Kingdom

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The cost of Net Zero

Project Findings

For the Higher and Further Education sector to transition to Net Zero, it is estimated that it will cost a total of **£43.8 bn**. This is made up of a total of **£37.1 bn** to decarbonise the Higher Education sector and **£6.7 bn** to decarbonise the Further Education Sector.

The analysis presented has been prepared so that the categorisation can mirror the [‘Accelerating the UK Tertiary Education Sector towards Net Zero’](#) report published by The Royal Anniversary Trust.

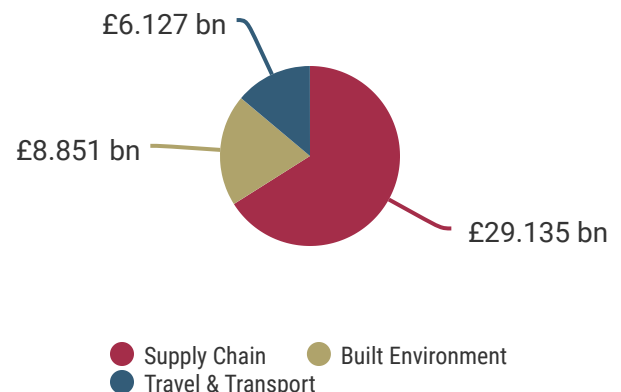
This work found that the largest area requiring investment is within the Supply Chain (this was expected following The Royal Anniversary Trust's report outlining the size of the sector's Scope 3 emissions). This is followed by investment within the Built Environment and then finally investments required into the Travel and Transport system.

This project has produced an assessment of the cost of Net Zero which is detailed within this report and a calculator to support institutions in their planning for those costs.

What is Net Zero?

Cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere (also known as offsetting)

Chart 1: The cost of Net Zero for the HE / FE Sector (split by Action Pathway)



The cost of Net Zero: Project Background

Background

As universities and colleges are under significant financial pressures, it can be difficult to justify large, costly, decarbonisation projects, for example a large-scale transformation of existing energy infrastructure. An environment of high inflation and interest rates, rising energy bills and increased financial support for students and staff has made allocating budgets more difficult.

However, the evidence is clear that improved energy and carbon management will result in cost savings in the long term and investing in green options can bring economic as well as environmental benefits.

Under ideal circumstances, (i.e., with sustained, reliable funding streams that make borrowing possible), the sector should take a long-term investment approach to financing sustainability and the decarbonisation of its estate and operations. Working with its stakeholders, including the Department for Education and devolved governments, it should identify ways of unlocking greater investment from a wider range of sources to support the delivery of its Net Zero strategies.

This project has the principal purpose of supporting Universities and Colleges to improve their planning in this area, by allowing the sector as a whole to understand the expected cost of Net Zero. It also provides a tool to support individual institutions in developing a strategic level financial plan for Net Zero.

Scope of this project

The project analysis echoes the findings of The Royal Anniversary Trust report. The UK Higher Education (HE) and Further Education (FE) sectors' emissions across Scope 1, 2 and 3 were estimated to be 17.8 Million tCO₂e (excluding financed emissions). HE institutions contribute approximately 88% of this and FE 12%.

The analysis from The Royal Anniversary Trust report showed that the greatest emissions areas are the following:

1) Supply Chain

A major part of any institution's Scope 3 carbon emissions sits within its supply chain and is far greater than Scope 1 and 2 emissions combined, accounting for more than 36% of the sector's total footprint.

2) Built Environment

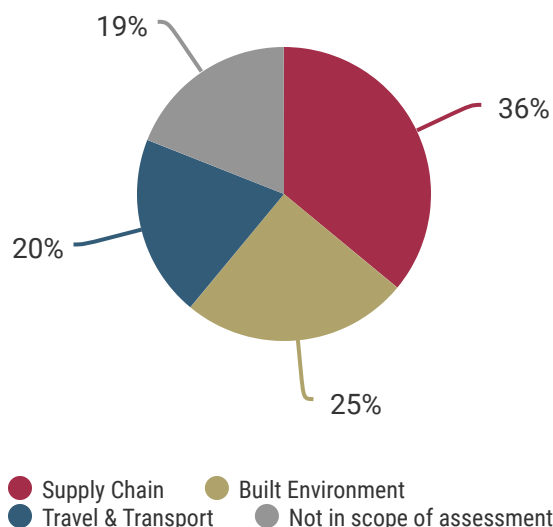
Built Environment emissions account for nearly 25% of total emissions.

3) Travel and Transport

The area of Travel and Transport is a significant source of emissions representing almost 20% of the sector's footprint.

These three key areas of emissions account for a total of over 13 MtCO₂e, and make up approximately 80% of emissions. The remaining 20% relates to other emissions that are not a focus of this report.

Chart 2: Sector emissions covered by the cost of Net Zero analysis



The cost of Net Zero: Project Background

Methodology

This project provides some high level figures for the sector to reach Net Zero and for a typical HE or FE institution to cost its journey to Net Zero. The following steps explain how the figures have been derived:

1. Identify the emissions categories relevant for a HE and FE Institution. This was done using the [EAUC's Standardised Carbon Emissions Framework \(SCEF\)](#).

2. Collection of data from a selected number of institutions who have calculated their emissions, to aggregate those emissions and identify an average typical emissions figure for each of the emissions categories identified as part of the SCEF (See Table 1).

3. Calculation of a weighted cost per tonne to decarbonise for each SCEF carbon emissions category (based on current costs of decarbonisation). This was done by calculating the sum of the cost of implementing all relevant carbon reduction measures for that category, and then multiplying the total cost figure by the typical emissions figure for that particular category.

Weighted Cost of Decarbonisation per tonne (tCO_{2e}) for any emissions category

= Sum of the cost of all relevant carbon reduction measures for specified category
x
All category-related emissions (tCO_{2e})

The costs per reduction measure have been prepared using modelled "average" business cases by Energise, to derive a typical range of costs and paybacks on a per-site basis. The software used for the modelling is [RETScreen Energy Management Software](#) that allows assessment of low-carbon planning, implementation, monitoring and reporting, which is published by Natural Resource Canada, and used around the world.

4. The sum of the total cost to a typical institution to reach Net Zero can then be calculated by adding the costs for all the relevant SCEF categories for a typical HE and FE Institution.

5. A scenario model was then created using the data from the conceptual HE and FE Institution and the typical journey that an institution would take to transition to Net Zero by 2050 using data from the [6th Carbon Budget](#) (the Government's carbon plan). The figures calculated were used to see how much investment was required and how this investment can be profiled.

6. The total cost of decarbonisation for the sector was reached by calculating a weighted cost per tonne to decarbonise each carbon emissions category (based on current costs of decarbonisation). The sum of this was then multiplied by the sector emissions (tCO_{2e}).

Total Cost of Decarbonisation for HE / FE Sector

= Sum of all Weighted Costs to Decarbonise for all HE / FE emissions categories
x
Total HE / FE Sector Emissions

Terms explained

MtCO_{2e} - Millions of tonnes of carbon emissions

Financed emissions - Relate to the emissions resulting from the institutions activities in the real economy that are financed through their pension schemes, endowments, and investments.

6th Carbon Budget - Provides Ministers advice on the volume of greenhouse gases the UK can emit during the period 2033-2037.

Action Pathways

Supply Chain - Total carbon footprint related to purchased goods and services

Built Environment - Total carbon footprint related to heat, power and construction of estates

Travel and Transport - Total carbon footprint related to Travel (business and student travel)

The cost of Net Zero: Breakdown by Action Pathway

The cost of Net Zero

Table 1 below shows the aggregated emissions calculated from collecting data from a selected number of institutions who have calculated their emissions, and identifying an overall emissions figure.

Reduction Area	Aggregated Emissions for HE (MtCO ₂ e)	Aggregated Emissions for FE (MtCO ₂ e)
Supply Chain	6.33	0.93
Built Environment	1.56	0.48
Travel & Transport	0.68	0.16
Total	8.57	1.57

Table 1: Emissions breakdown by Action Pathway

Table 2 below shows the cost of Net Zero by multiplying the Weighted Average Cost of Decarbonisation by the Aggregated Emissions for HE and FE Institutions for each Reduction Area.

Reduction Area	HE Cost	FE Cost
Supply Chain	£25.409 bn	£3.727 bn
Built Environment	£6.562 bn	£2.019 bn
Travel & Transport	£5.141 bn	£0.985 bn
Total	£37.112 bn	£6.731 bn

Table 2: Cost breakdown by Action Pathway

Chart 3: Cost of Net Zero for HE Sector

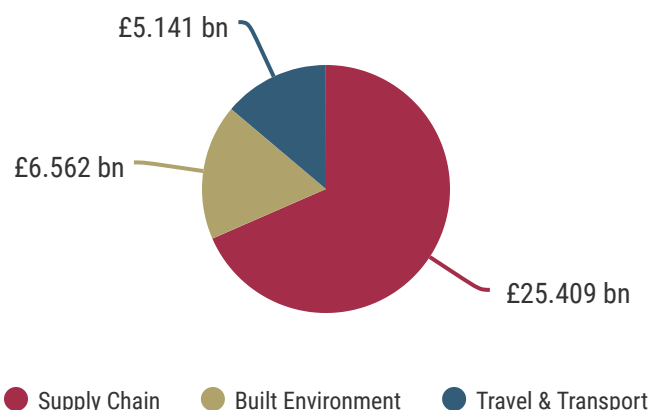
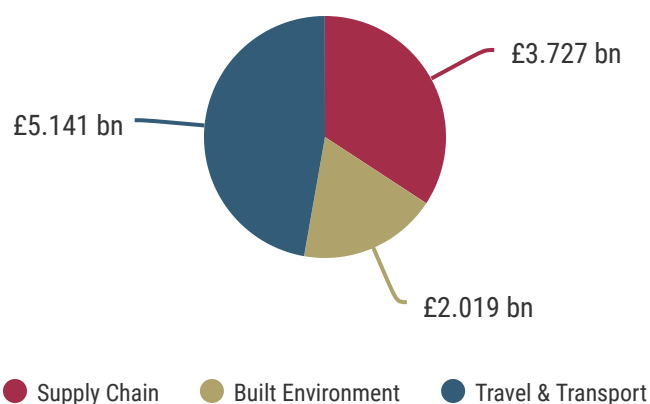


Chart 4: Cost of Net Zero for FE Sector



Supply Chain

Table 3 shows that the average weighted cost to decarbonise the emissions associated with Supply Chain is £4,007 per tCO_{2e}. This figure is then multiplied by the total typical carbon emitted in tonnes by an institution from its Supply Chain, giving a total of £25.409 bn for HE Institutions and £3.727 bn for FE Institutions.

Decarbonisation in this area will be principally achieved through:

1. Low carbon logistics
2. Reduction of the embodied carbon in products/goods purchased by institutions
3. Supplier engagement/management
4. Water/waste resource efficiency

This area will require collaboration between institutions who share common supply chains and between individual institutions and their suppliers (typically driven by an annual supplier engagement questionnaire and ongoing work on decarbonisation activities together).

There are clear opportunities for sector level collaboration on key categories of supply/products that are used in large volumes.

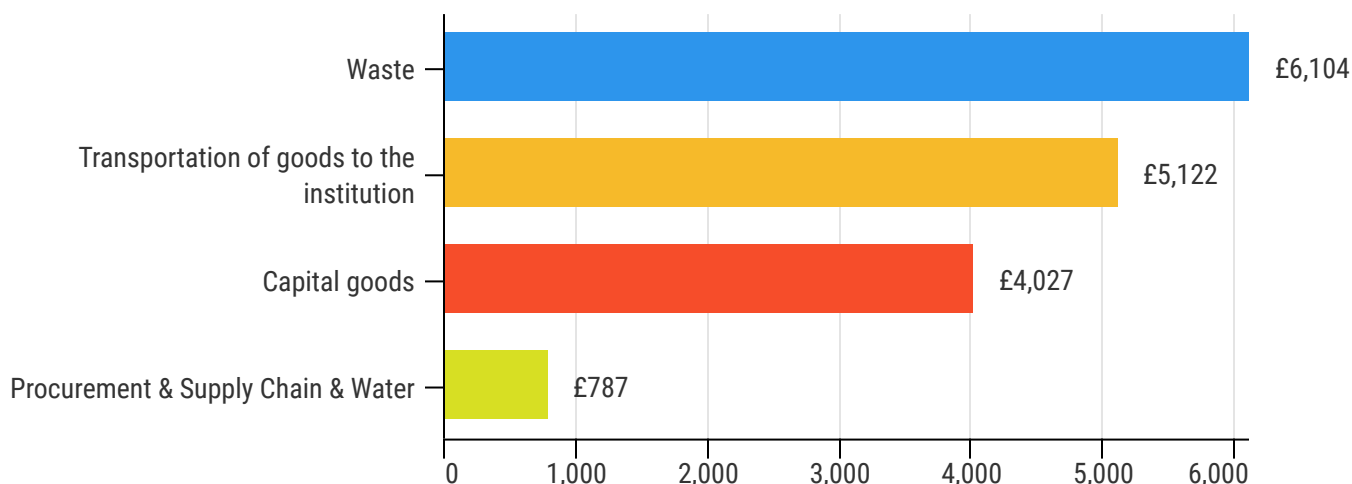
Supply Chain Average Weighted Cost (per tCO_{2e})
 ×
 Supply Chain Emissions
 =
 Total Supply Chain Decarbonisation Cost

HE: £4,007 (per tCO_{2e}) × 6.33 MtCO_{2e} = £25.409bn
 FE: £4,007 (per tCO_{2e}) × 0.93 MtCO_{2e} = £3.727bn

Emissions Category	Weighted Average Cost to decarbonise per tCO _{2e}
Transportation of goods to the institution	£5,122
Capital goods	£4,027
Procurement & Supply Chain & Water	£787
Waste	£6,104
Average cost	£4,007

Table 3: Supply Chain Action Pathway breakdown

Figure 5: Weighted Average Cost by Emissions Category



Built Environment

The average weighted cost to decarbonise the emissions associated with the Built Environment is £4,206 per tCO₂e (See Table 4). This figure is then multiplied by the total carbon emitted in tonnes by an institution from its Built Environment, giving a total of £6.562 bn for HE and £2.019 bn for FE.

Decarbonisation in this area will be principally achieved through:

- Improvements in building fabric
- Energy efficiency measures and electrification/fuel switching for heating systems
- Decarbonisation of catering operations
- Electrification/fuel switching for other uses of fossil fuels and decarbonisation of electricity through renewable solutions
- Low carbon refrigerants and reduced Volatile Organic Compounds (VOC's)
- Responsible environmentally conscious land use
- Other low carbon heat solutions (e.g. district heating)
- Behavioural Change

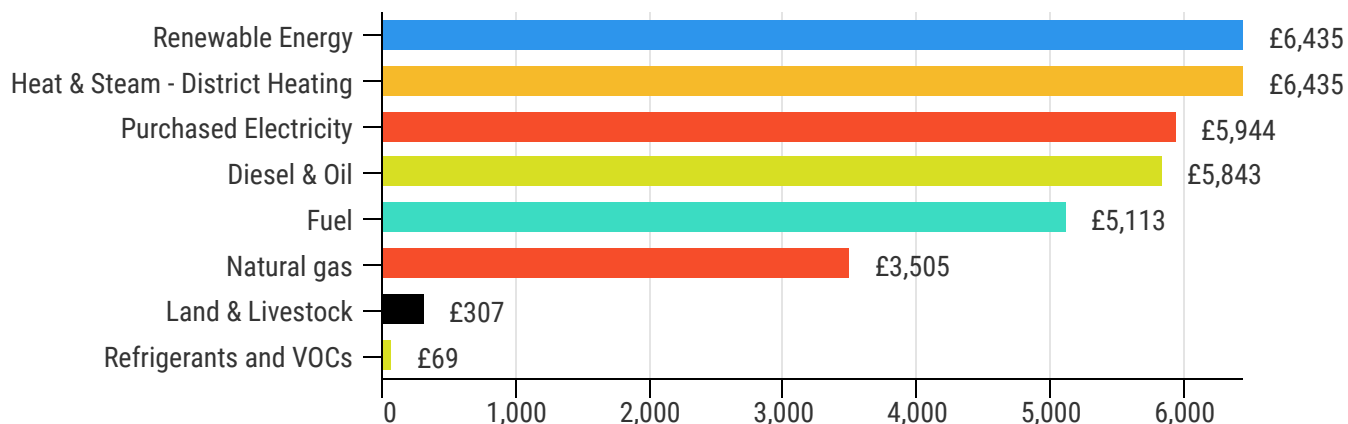
This area will require detailed feasibility studies, adoption of clear policies, and capital planning to ensure that the costs for this area are embedded into long term strategy. Many of these solutions will have a direct return on investment, as they reduce the day to day operating costs of the institution, so any detailed feasibility study should review the cost/benefit analysis of these measures.

$$\begin{aligned}
 &\text{Built Environment Average Weighted Cost (per tCO}_2\text{e)} \\
 &\quad \times \\
 &\quad \text{Built Environment Emissions} \\
 &\quad = \\
 &\text{Total Built Environment Decarbonisation Cost} \\
 \\
 &\text{HE: } \text{£4,206 (per tCO}_2\text{e)} \times 1.56 \text{ MtCO}_2\text{e} = \text{£6.562bn} \\
 &\text{FE: } \text{£4,206 (per tCO}_2\text{e)} \times 0.48 \text{ MtCO}_2\text{e} = \text{£2.019bn}
 \end{aligned}$$

Emissions Category	Weighted average cost to decarbonise per tCO ₂ e
Natural gas	£3,505
Refrigerants and VOCs	£69
Diesel & Oil	£5,843
Land & Livestock	£307
Fuel	£5,113
Purchased electricity	£5,944
Renewable energy	£6,435
Heat & steam - district heating	£6,435
Average cost	£4,206

Table 4: Built Environment Pathway breakdown

Figure 6: Weighted Average Cost by Emissions Category



The cost of Net Zero: Breakdown of Action Pathways

Travel and Transport

Table 5 shows that the average weighted cost to decarbonise the emissions associated with Travel and Transport is £6,088 per tCO_{2e}. This figure is then multiplied by the total carbon emitted in tonnes by an institution from its Travel and Transport, giving a total cost to decarbonise of £5.141 bn for a HE Institution and £0.985 bn for a FE Institution.

Decarbonisation in this area will be principally achieved through:

- Modal shifts in travel/behaviour change in society to lower carbon forms of travel/transport (and the sector's support of those)
- Low/zero carbon fleets
- The electrification of travel/transport systems
- The decarbonisation of electricity through renewable energy solutions

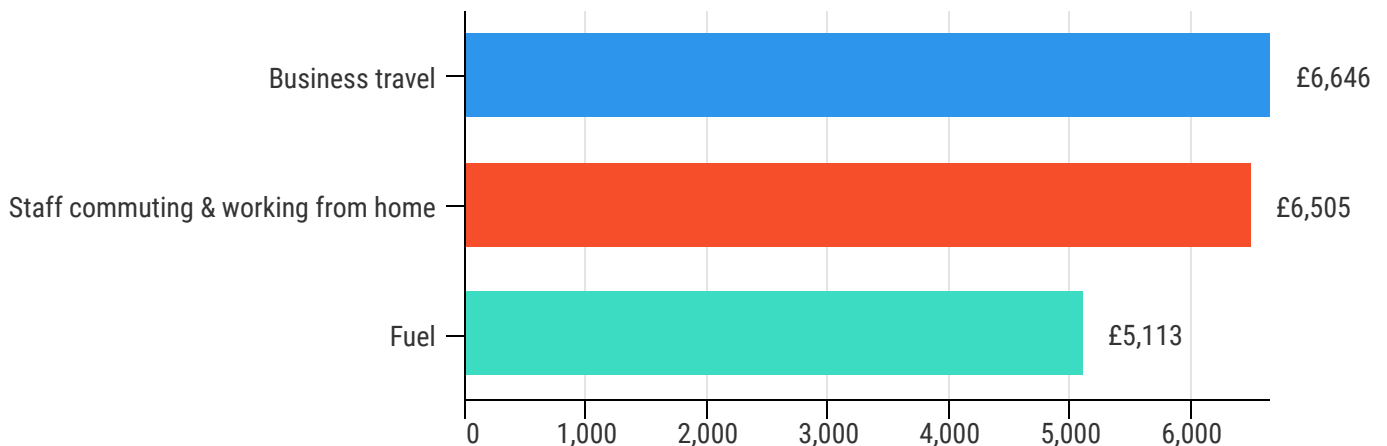
Table 5 shows that there is no material difference in cost effectiveness of any of the emissions categories identified, and all are relatively expensive. This is because the measures depend on switching to renewable fuels, energy efficiency and the adoption of green transport such as electric vehicles.

$$\begin{aligned}
 &\text{Travel \& Transport Average Weighted Cost (per tCO}_2\text{e)} \\
 &\quad \times \\
 &\quad \text{Travel \& Transport Emissions} \\
 &\quad = \\
 &\quad \text{Total Travel \& Transport Decarbonisation Cost} \\
 \\
 &\text{HE: } \mathbf{£6,088 \text{ (per tCO}_2\text{e)} \times 0.84 \text{ MtCO}_2\text{e} = \mathbf{£5.141bn}} \\
 &\text{FE: } \mathbf{£6,088 \text{ (per tCO}_2\text{e)} \times 0.16 \text{ MtCO}_2\text{e} = \mathbf{£0.985bn}}
 \end{aligned}$$

Emissions Category	Weighted average cost to decarbonise per tCO _{2e}
Business travel	£6,646
Staff & Student commuting & working from home	£6,505
Fuel	£5,113
Average cost	£6,088

Table 5: Travel and Transport Pathway breakdown

Chart 7: Weighted Average Cost by Emissions Category



The cost of Net Zero: Impacts on an Institution

Impacts on an Institution

The high level strategic summary of costs by area are summarised by institution type, with detailed tables for each shown on the next two pages.

Chart 8: Cost of Net Zero (typical Higher Education Institute)

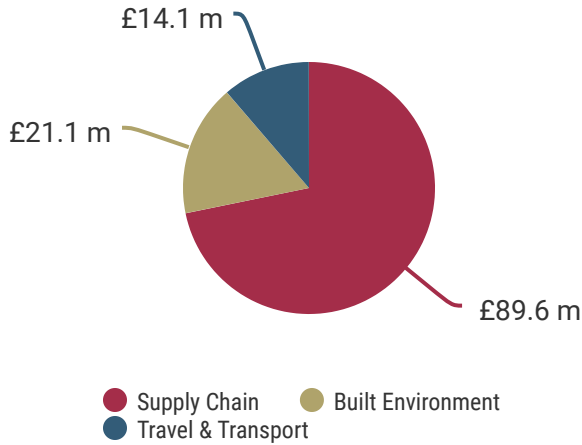
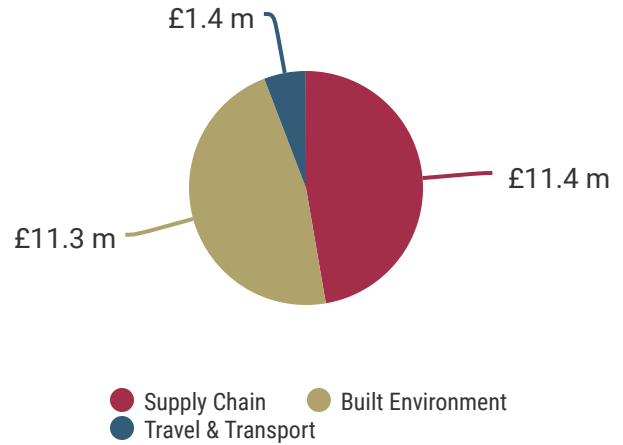
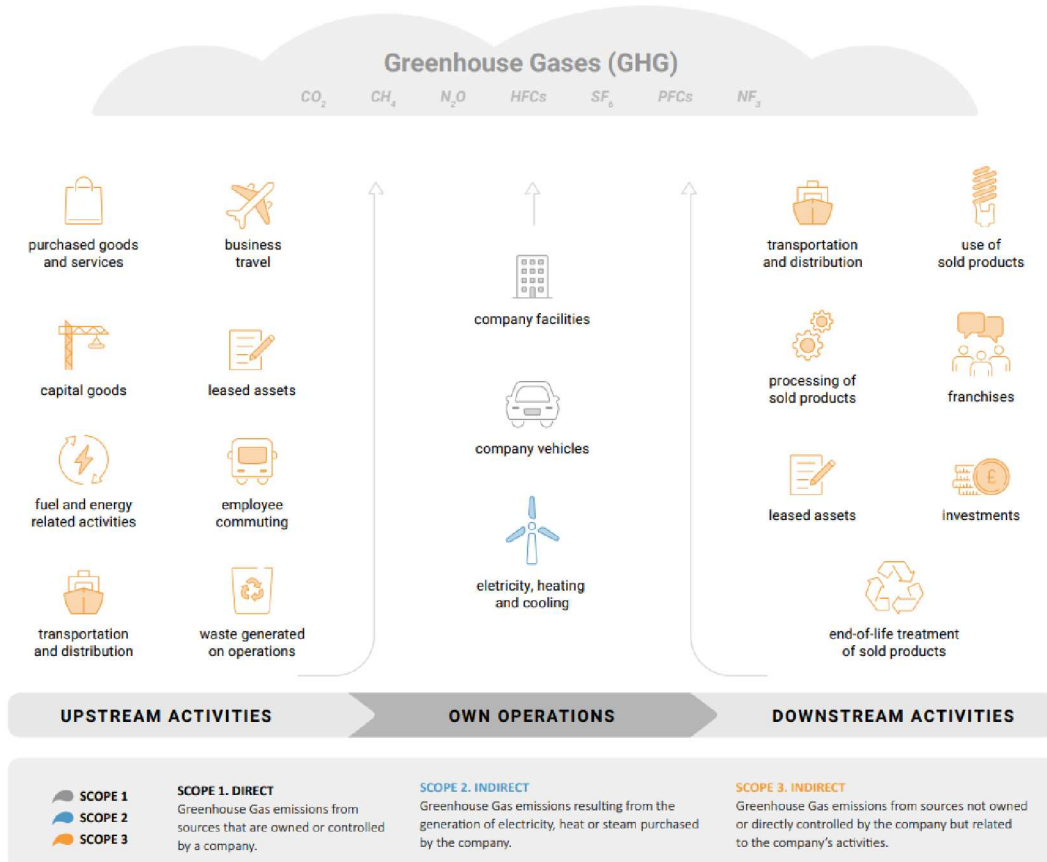


Chart 9: Cost of Net Zero (typical Further Education Institute)



Below is a graphical reminder of the [Greenhouse Gas \(GHG\) Protocol](#) and the 3 emissions scopes.



The cost of Net Zero: Impacts on an Institution

Higher Education

Table 6 below details a typical carbon footprint for an institution using averaged data from real reporting from HE Institutions, and then presents the result using the modelling created in this project. It is important to note that the costs given in the investment column relate to additional expenditure associated with reaching Net Zero. For example, if the solution would be something typically done as a marginal improvement on top of existing expenditure, the investment figure provided would only show the marginal improvement cost, not the whole expenditure. If you would typically retrofit as a solution to reaching Net Zero, the investment cost provided will be the whole cost for this solution.

Cost routes:

- Direct = the cost and benefit are directly paid for
- Indirect = the cost and benefit are indirectly paid for (i.e. part of a wider procurement contract/the return on investment would be received by a third party and then passed on at their discretion commercially)
- External cost = cost associated with carbon footprint where the institution is not expected absorb the cost of decarbonisation (either directly or indirectly) - e.g. students pay for it

Scope	SCEF Category	tCO _{2e}	Direct/Indirect	Investment
1	Natural Gas	2231	Direct	£5.4m
1	Fuel	12	Direct	£0.063m
1	Refrigerants & VOC	290	Direct	£0.020m
1	Diesel & Oil	0	Direct	£0
1	Land & Livestock	0	Direct	£0
2	Purchased electricity	2626	Direct	£15.6m
2	Renewable energy	0	Direct	£0
2	Heat & steam - district heating	0	Direct	£0
3	Fuel & Energy used to transport to the institution		N/A	£0
3	Waste	90	Direct	£0.549m
3	Student accommodation	0	External	£0
3	Leased buildings & vehicles (upstream)	0	Direct/Indirect	£0
3	Business travel	592	Direct	£3.9m
3	Staff commuting & working from home	1565	Indirect	£10.2m
3	UK student travel & international student travel	7814	Direct / Indirect	£54.5m
3	Procurement & Supply Chain & Water	4086	Indirect	£3.2m
3	Transportation of goods to the institution	735	Indirect	£3.8m
3	Capital goods	6868	Direct	£27.7m
	TOTAL	26,909		£124.9m

Table 6: Higher Education modelled outcome

The cost of Net Zero: Impacts on an Institution

Further Education

Table 7 below details an example carbon footprint for an institution using averaged data from real reporting from FE Institutions, and then presents the result using the modelling created in this project. It is important to note that the costs given in the investment column relate to additional expenditure associated with reaching Net Zero. For example, if the solution would be something typically done as a marginal improvement on top of existing expenditure, the investment figure provided would only show the marginal improvement cost, not the whole expenditure. If you would typically retrofit as a solution to reaching Net Zero, the investment cost provided will be the whole cost for this solution.

Cost routes:

- Direct = the cost and benefit are directly paid for
- Indirect = the cost and benefit are indirectly paid for (i.e. part of a wider procurement contract/the return on investment would be received by a third party and then passed on at their discretion commercially)
- External cost = cost associated with carbon footprint where the institution is not expected absorb the cost of decarbonisation (either directly or indirectly) - e.g. students pay for it

Scope	SCEF Category	tCO _{2e}	Direct/Indirect	Investment
1	Natural Gas	1550	Direct	£3.7m
1	Fuel	315	Direct	£1.6m
1	Refrigerants & VOC	0	Direct	£0
1	Diesel & Oil	0	Direct	£0
1	Land & Livestock	0	Direct	£0
2	Purchased electricity	993	Direct	£5.9m
2	Renewable energy	0	Direct	£0
2	Heat & steam - district heating	0	Direct	£0
3	Fuel & Energy used to transport to the institution	88	N/A	£0
3	Waste	602	Direct	£3.7m
3	Student accommodation	0	External	£0
3	Leased buildings & vehicles (upstream)	0	Direct/Indirect	£0
3	Business travel	68	Direct	£0.454m
3	Staff commuting & working from home	139	Indirect	£0.903m
3	UK student travel & international student travel	772.5	Direct / Indirect	£5.4m
3	Procurement & Supply Chain & Water	1241	Indirect	£0.977m
3	Transportation of goods to the institution	266	Indirect	£1.4m
3	Capital goods	0	Direct	£0
	TOTAL	6,035		£24m

Table 7: Further Education modelled outcome

The cost of Net Zero: Decarbonisation Scenario



What is carbon offsetting?

A process that involves a reduction in, or removal of, carbon dioxide or other greenhouse gas emissions from the atmosphere in order to compensate for emissions made elsewhere

Decarbonisation Scenario

The sector level emissions and projection of the emissions have been modelled under key emissions categories. The chart shown below presents a 2050 Net Zero target date.

The most difficult emissions categories are student flights and elements of the supply chain. Direct emissions and purchased energy are likely to decarbonise first. There are also residual emissions projected to remain in 2050. These emissions will need to be offset through a credible offsetting provider. See EAUC's [Carbon Coalition Principles on Offsetting](#) for more information.

You can produce your own scenario using the calculator associated with this project.

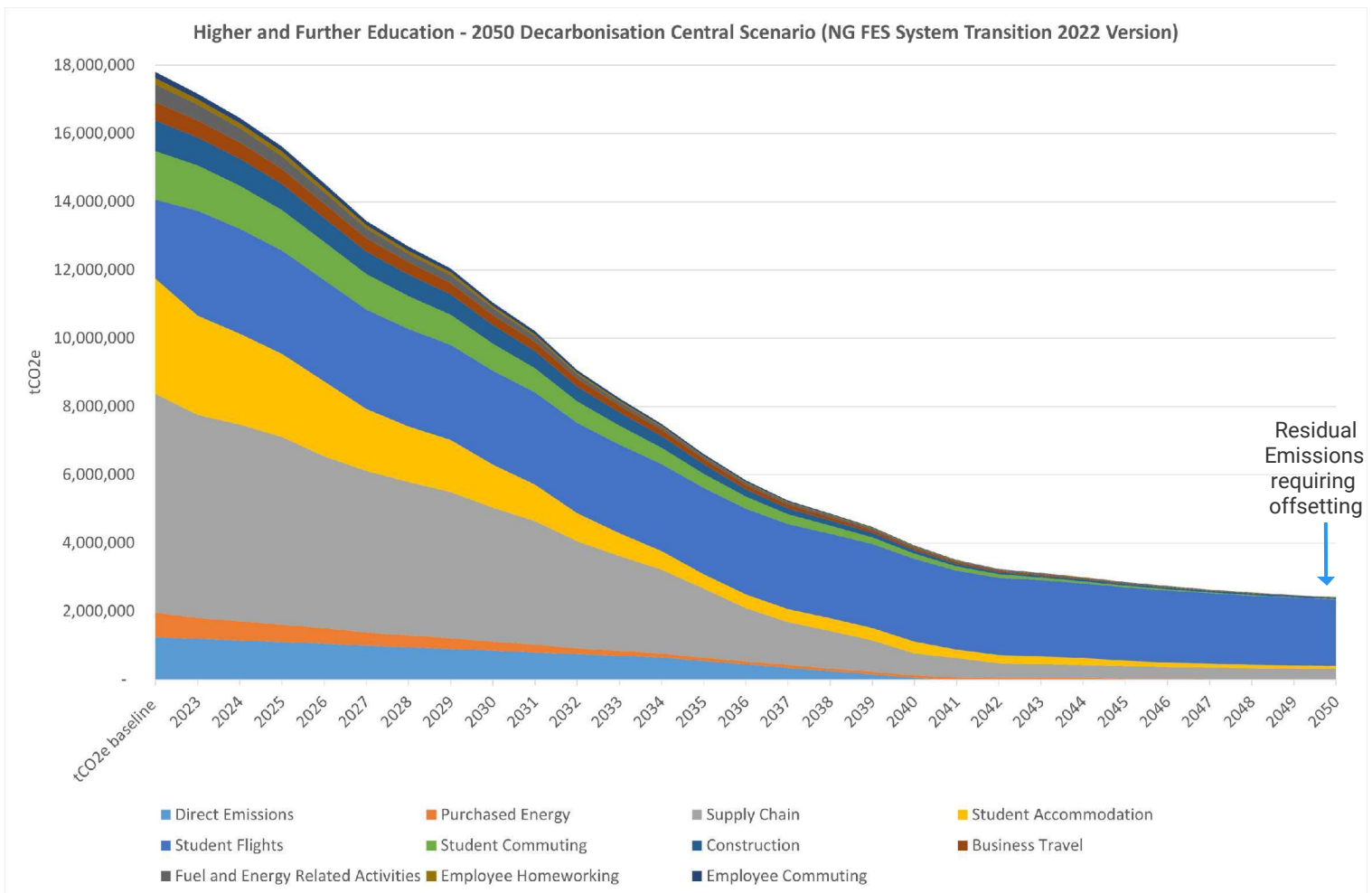


Chart 10: Sector decarbonisation by 2050 - emissions projection

Sector Actions

The findings of this work support the sector in planning for Net Zero, but each institution needs to have its own plan. Here we outline a key set of actions:

i) Understand your current carbon emissions

This can be calculated using the EAUC's [Streamlined Energy & Carbon Reporting \(SECR\)](#) tool or by translating the EAUC's [Standardised Carbon Emissions Framework \(SCEF\)](#) into an institution-specific excel sheet.

ii) Set a Net Zero target

If your institution has not yet set a Net Zero target it is important that the institution's leader and senior executive team develop one as a priority. The target should align with the institution's strategic plan and be supported by policies underpinned by economic need.

iii) Strategic planning

Any institution that sets a Net Zero target must incorporate the actions required to decarbonise its activities into the strategic decision-making for the future of the institution. It is important that the institution's leader and senior executive team identify which areas of activity take priority.

iv) Financial planning and procurement policies

Executing a Net Zero plan requires robust financial planning and procurement policies due to the scale of the investments required and the impacts that will be felt across the institution, particularly in the Supply Chain, Built Environment and the Travel/Transport systems. Cash flow needs to be managed and the return on investment of each measure balanced to avoid financial stress. Having a detailed understanding of the cost of decarbonisation will enable a Finance Director and the Procurement Director to understand the kind of budget required to implement the institution's decarbonisation strategy.

This report is accompanied by a calculator tool which can be used by any institution which has not already developed an approach to calculating the cost of decarbonisation

v) Property and fleet planning

Given the significance of emissions from the Built Environment and Travel and Transport, any institution must incorporate sustainability into their property and fleet planning activities. The Estates Director for an institution will therefore be required to understand how Whole Life Carbon can be reduced for existing and new buildings and how emissions related to transport for the institution's estates can also be reduced.

vi) Sustainability strategy

Achieving Net Zero by any date before 2050 is an ambitious and challenging target for any institution. It will require the Sustainability Director and/or Manager to work with all areas of the institution to develop and implement a Sustainability Strategy that is in harmony with the organisation's overall business strategy. If an institution does not have a Sustainability Manager, it is important that the management team develops knowledge and expertise in this area.

vii) Taking action as a community

Meeting the targets set out will require every member of an institution individually and collectively to play their part. Alongside Executive and Senior Management, students and staff have a role to play to ensure their individual behaviour on campus and in their accommodation is as sustainable as possible. Whilst doing so, they must recognise the financial commitment that is required to reach Net Zero.

Sector Actions

viii) Policy makers must recognise that decarbonisation is a big financial commitment

Decarbonising the sector will have direct and indirect cost implications. It is likely that there will be significant direct expenditure for institutions not only as a capital outlay to invest in decarbonisation measures but also as increased recurrent spend.

Indirect inflationary pressures are likely to increase amid measures to discourage high-carbon energy sources. The adoption of sustainable products, standards and processes in the supply chain of an institution to reduce its emissions will indirectly put inflationary pressure on prices of goods and services purchased through the supply chain because in general these measures cost more than 'business as usual'.

Therefore, the intervention decisions that policymakers make can have significant cost implications for the sector. Supporting the sector to be more financially resilient, providing ease of access to capital and providing incentives for action on decarbonisation are all areas where policy could be more explicit. The existing level of commitment will not be sufficient to support the sector in achieving Net Zero based on the projected level of cost outlined within this report.

In summary, the following actions are recommended:

1. With a reasonable estimate of current carbon emissions, conduct an analysis of total estimated cost of Net Zero using the calculator that accompanies this report or an equivalent output.
2. Develop a plan to phase implementation of your decarbonisation plan, considering your Net Zero Target date and the financial implications of meeting that target.
3. Develop a high level set of annual budgets that allocate funding for decarbonisation activities and combine them with the institution's operational budget. Review the strategic implications of this analysis within your institution.
4. Establish the necessary objectives, key results and KPIs needed to be able to monitor the effectiveness of investments.

The project findings reinforce the fourteen (14) recommendations made in the 'Accelerating towards Net Zero' report published by The Royal Anniversary Trust. These are summarised in Table 8 on the next page.

Explanatory Note on Cost

The analysis has been undertaken to estimate the the primary cost of Net Zero - not any secondary costs. The meaning of primary costs is that the figure is intended to include equipment, material and installation costs (and other equivalent costs), but does not include secondary costs such as decant (shifting from building) costs, asbestos removal, decoration/making good, any organisation specific procurement process costs, or any estimation of the level of unrecoverable VAT. The figure also doesn't include any contingency value. The reason for not including any secondary costs is these will be very variant for each institution and are in some respects not a cost of Net Zero but a cost associated with procurement/legacy condition of estates. Initial indications from institutions that have calculated these secondary costs are that they can be significant (estimates that they could be combined up to the value of the primary costs, dependent on the circumstances). The calculator provided alongside this report allows for adjustments to be made for the secondary costs.

The Royal Anniversary Trust - 'Accelerating towards Net Zero' Report Recommendations

Recommendations to Government

1. Establish a UK-wide Decarbonisation Institute
2. Fast-track the transformation of the National Grid to support renewables
3. Fund the research and development of a business travel measurement tool
4. Require councils to consult with institutions on sustainable transport plans
5. Require publicly funded research bodies to ensure principles of sustainable travel are included within bids
6. Make data from existing carbon reporting requirements available in a dedicated online portal
7. Incorporate sustainability and carbon reporting training into the 'Help to Grow' scheme
8. Extend 0% VAT rate relief to incentivise low emissions refurb and retrofit of existing tertiary building stock
9. Ring-fence Salix funding proportionate to carbon emissions of sector
10. Create a UK government-backed mechanism for smaller institutions to raise private sector funding
11. Fund and create a digital hub to share resources
12. Fund a regional human resource for FE institutions to transfer skills needed to calculate emissions
13. Incentivise FE leavers and HE graduates with sustainability expertise to work in the sector
14. Regulate and improve transparency on land use and sale for carbon capture schemes

Table 8: Fourteen recommendations to Government from the 'Accelerating Towards Net Zero' Report published by The Royal Anniversary Trust



Cost of Net Zero Calculator

As part of this project, we have produced a calculator for institutions to project their spend and emissions at a strategic level and provide an estimate of what it will cost to reach Net Zero. The calculator along with some worked examples can be downloaded from the EAUC website [here](#).

The tool relies on your carbon footprint having been calculated in line with the Standardised Carbon Emissions Framework. If you have not already calculated your carbon emissions, there is guidance on how to do this in the Standardised Carbon Emissions Framework at: <https://www.eauc.org.uk/scef>

This calculator contains:

- A model that provides Higher and Further Education and its stakeholders with an indication of high level estimated costs of implementing carbon reduction measures based on the “pace” selected.
- A structured table of carbon reduction opportunities which can be used to identify options and select which ones to implement.

The calculator allows the user to:

- **Conduct high level analysis** - Enter their carbon footprint aligned to the SCEF and provide a high-level estimated cost of decarbonisation, with an adjustment factor for completion of emissions reductions to date in the respective scope/category.
- **Plan** - Select measures from the database into a top level project list and produce a high-level summary of the cost/impact of those measures.
- **Conduct a scenario model** – Allow the user to apply overall carbon reduction measures from the database to their carbon footprint by year, to derive a projected emissions reduction scenario and high-level cost model/budget projection.

This report was published jointly by:

- Association of University Directors of Estates (www.aude.ac.uk)
- British Universities Finance Directors Group (www.bufdg.ac.uk)
- Environmental Association of Universities and Colleges (www.eauc.org.uk)

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