



**CARBON
REDUCTION PLAN
2022**

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FOREWORD



As the world responds to the challenges of climate change and threats to humanity that this represents we need, as an institution, to respond. Part of that response is how we work towards a net zero future and making NCH sustainable is a key challenge for all the College. We have developed this Carbon Reduction Plan in collaboration with the NCH community and with external expertise. Success in delivering this plan will need to include scientific, economic, social, cultural and individual behaviours factors which in turn will require the involvement of all the NCH and Northeastern communities. This Carbon Reduction Plan is an important statement of intent and one that we should all get behind to ensure that we deliver it as part of a wider institutional and personal response to the climate crisis.

A handwritten signature in black ink, appearing to read 'Rob Farquharson', written in a cursive style.

*Rob Farquharson, CEO
New College of the Humanities*

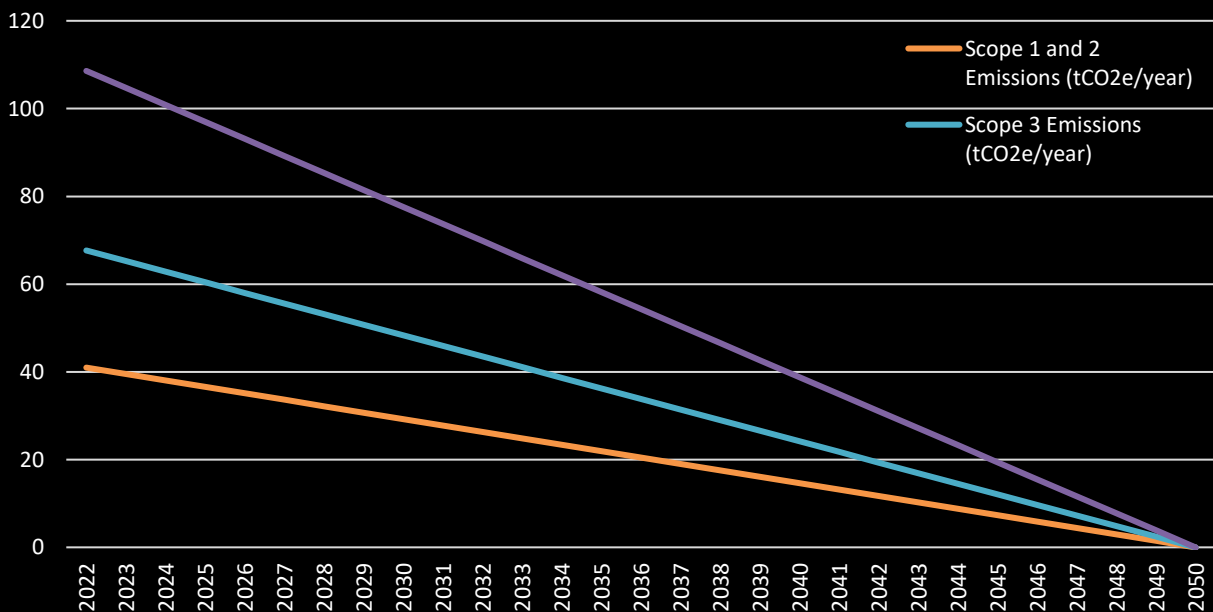
EXECUTIVE SUMMARY

NCH London is implementing a carbon reduction plan in order to help reduce the carbon emissions of its Devon House campus, in line with the UK's goals to achieve Net Zero by 2050. The campus has placed sustainability as an important aspect of its campus, from the fabric of the building to its day-to-day functions.

This plan outlines the campus' current carbon emissions, future target emissions and potential ways emissions can be reduced directly, in order to help Devon House to reach Net Zero by 2050. Target emissions involve incrementally decreasing net carbon emissions by approximately 4% every year, through a combination of actions, and offsetting as required.

This has involved measuring all scopes of emissions: including gas, electricity and water usage; waste disposal; business travel; employees commuting or working from home; and procurement. The plan is supplemented by a spreadsheet which has calculated predicted baseline emissions for the 2021-22 academic year and can be used to compare the success of reaching future targets.

Emission Projections based on target of Net Zero by 2050





INTRODUCTION

New College of the Humanities (NCH London) offers a vibrant, collegiate community delivering broad and academically rigorous degree programs. In September 2021 NCH London moved into its new campus at Devon House.

Located in central London's St Katharine Docks, Devon House combines unrivalled views of London and the Thames, providing a vibrant waterside environment. With 38,000 square feet of space across the ground and first floors, it offers substantial teaching facilities with 14 classrooms, 7 tutorial rooms, and seminar space, providing flexible capacity for class sizes from 18 to 80. A first-floor open event area accommodates up to 180, and a ground floor open event space seats up to 70. Overall, the innovative and modifiable space serves up to 1,400 students and staff, with a capacity of up to 715 at one time.

With the opening of Devon House, NCH committed to creating a sustainable campus, from the fabric of the building itself to day-to-day functions. So far, steps taken have included:

- Sourcing furniture/joinery predominantly from local UK manufactures
- Creating wall panel fabrics from post-consumer recycled plastic by the SEAQUAL INITIATIVE, who aim to combat marine plastic pollution
- Ensuring our classroom flooring is carbon neutral across its lifespan with more than 80% recycled and bio-based content
- Ensuring all pinnable surfaces are 91% natural materials, manufactured solely using renewable energy sources
- Using intelligent lighting control systems to save electricity

Now, we have created our campus' carbon reduction plan to demonstrate our continuing commitment to Net Zero and sustainability.

OUR COMMITMENT TO NET ZERO

NCH London is committed to achieving Net Zero by 2050

This commitment comes from a recognition of the climate crisis and the role NCH London can offer to help mitigate it. It follows the actions of 1,050 universities from 68 countries, who in September 2021 made a range of new commitments to reach net-zero emissions by 2050 at the Times Higher Education Climate Impact Forum. The NCH London campus therefore intends to join this effort across Higher Education institutions to help protect our planet.

It will be the first campus in Northeastern University's global network to commit to Net Zero and joins a multitude of wider UK campuses working towards this shared goal.





OVERVIEW OF STRATEGY

With the scale of extreme weather we've seen over the past few years – from Australian bush fires to flooding in the UK – few people can deny that we are facing a climate crisis. The scientific evidence is clear: emissions of greenhouse gases, resulting from human activity, are causing our climate to change.

Greenhouse Gases (GHG) are emitted into our atmosphere when fossil fuels are burned to meet our demand for energy. Although it isn't the only harmful GHG, carbon dioxide is the most abundant of the greenhouse gases. For this reason, cutting carbon emissions, carbon footprints or seeking low-carbon alternatives are suggested as ways to address climate change.

The UK Government amended the Climate Change Act 2008 in 2019, by introducing a target of at least a 100% reduction in the net UK carbon account, compared to 1990 levels, by 2050. This means a requirement to reduce at least 100% of net UK greenhouse gas emissions, compared to 1990 levels.

Put simply, net zero refers to the balance between the amount of greenhouse gas produced and the amount removed from the atmosphere. This balance – or net zero – will happen when the amount of carbon we add to the atmosphere is no more than the amount removed.

If we are to reach this target of Net Zero by the middle of this century, considerable changes will need to take place well before that date, and ideally before 2050.



OVERVIEW OF STRATEGY

The NCH community recognises its corporate social responsibility; that all our activities have an impact on the environment, particularly in terms of carbon emissions and that we have our role to play in achieving the targets set in the Climate Change Act.

This Carbon Reduction Plan has been developed to express the commitment of NCH London to achieving carbon reductions in line with the amended UK Government Climate Change Act, 2019.

The goals of this carbon reduction plan are as follows:

- To establish the University's baseline carbon emissions
- To define the scope of carbon emissions included within the Plan
- To set yearly targets for reducing carbon emissions
- To outline an implementation plan and identify carbon emissions reduction projects

The strategy will involve identifying areas for carbon reduction actionable by the campus itself, acting on these as much as possible and then complimenting the strategy with offsetting at the end of the year, in order to compensate for any remaining emissions. For example, if the yearly target is to decrease by 4%, but a decrease of only 2% is reached by on-campus action, the remaining 2% could be compensated by offsetting. The goal is to decrease emissions directly as much as possible as a first resort, while recognising that offsetting can be a useful tool to help reach the campus' carbon reduction goals.

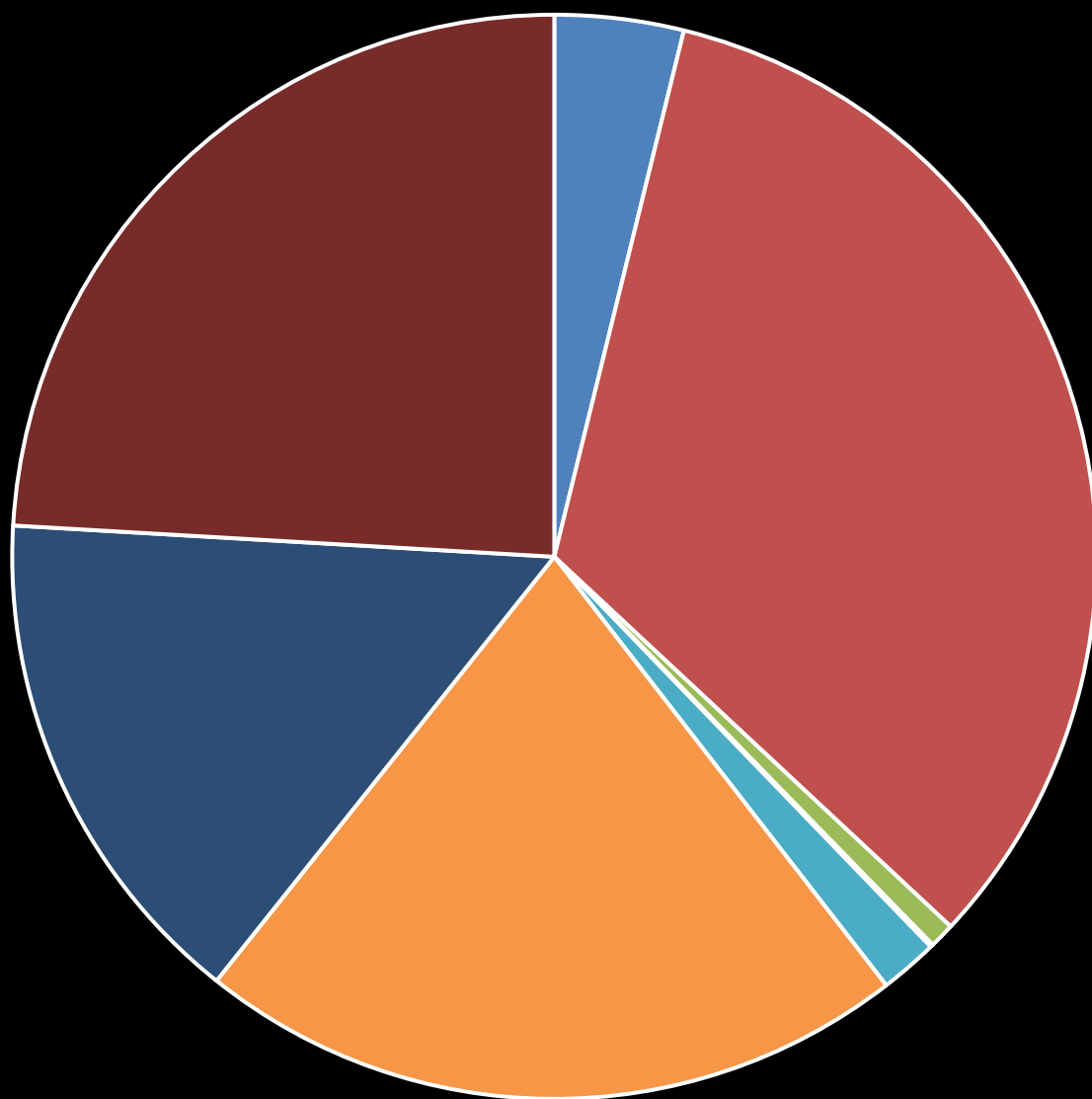
BASELINE EMISSIONS

The following table shows NCH London's baseline emissions for the new Devon House campus, which opened in September 2021. These figures have been used to generate targets for NCH London to aspire to and will also be used for comparative purposes when the emissions and targets are reviewed annually.

EMISSION TYPE	EMISSION SOURCE	TOTAL (tCO ₂ e) PER YEAR
Scope 1	Gas usage	4.18
Scope 2	Electricity purchased	35.96
	Water use and waste water removal	0.82
Scope 3	Waste Disposal	0.09
	Business Travel	1.88
	Employees commuting	23.03
	Employees working from home	16.53
	Procurement	25.77
Total Emissions		108.24

BASELINE EMISSIONS

Distribution of Carbon Emissions for Devon House Campus



- Gas Use
- Water use and waste water removal
- Business travel
- Employees working from home
- Electricity purchased
- Waste disposal
- Employees commuting
- Procurement

EMISSION SOURCE	METHODOLOGY AND ASSUMPTIONS
Gas usage	<p>Natural gas feeds the boilers only. Consumption (kWh) for the whole of Devon House is monitored by BMS. Calculated using meter readings for Devon House from Sep 2021 - Jan 2022 and projected usage from Feb – Aug 2022. Consumption for NCH has been calculated using an area pro-rata. Consumption (kWh) is monitored by the BMS.</p> <p>Assumptions:</p> <ul style="list-style-type: none"> - Carbon emissions associated with distribution losses ignored
Electricity purchased	<p>Electricity is purchased for small power and lighting only. Consumption (kWh) is monitored by the BMS. Calculated using meter readings from Sep 2021 – Jan 2022 and projected usage from Feb – Aug 2022.</p>
Water use and waste water removal	<p>Calculated using meter readings for Devon House from Sep 2021 – Jan 2022 and projected usage from Feb - Aug 2022. Water demand for NCH has been calculated using an area pro-rata.</p> <p>Assumptions:</p> <ul style="list-style-type: none"> - 100% of water demand was treated with removal
Business travel	<p>Largely Associated with recruitment. Calculated based on the 2022 NCH MARV Schedule for UK. An approximation was made for International travel to Boston.</p> <p>Assumptions:</p> <ul style="list-style-type: none"> - Mileage calculated from London using Google Maps
Waste disposal	<p>Calculated using waste records from Sept 2021 – Feb 2022 and projected usage from Feb – Aug 2022.</p>
Employees commuting	<p>Calculated using information from an employee survey of commuting habits.</p> <p>Assumptions:</p> <ul style="list-style-type: none"> - If employee answered 31+ miles as commuting distance, used 50 miles as an upper estimate - Bus emission data was from London buses only - Car emissions were taken from average petrol car
Employees working from home	<p>Data was taken from Energise document, which provided estimate annual emissions per employee depending on type of working. An average was calculated between WFH heating one room and heating whole house to generate estimated yearly figures.</p>
Procurement	<p>Procurement was measured since September 2022. Due to the campus being new, it is likely these figures are slightly higher than a typical year. Printing emissions were provided directly by the printing company for September 2022. Emission calculations for laptop/desktop procurement used data from the Dell website. Emissions for food procurement as taken from a paper by Poore & Nemecek (2018).</p>

CARBON REDUCTION TARGETS

NCH London is committed to achieving Net Zero by 2050. To stay on track to achieve this, NCH London must achieve a carbon reduction of circa 3.5 - 4% per year, requiring:

- A reduction of 3.88% from the baseline by 2023
- A reduction of 11.64% from the baseline by 2025
- A reduction of 27.16% from the baseline by 2030
- A reduction of 69.83% from the baseline by 2040

NOTE: these targets should be reviewed yearly and pushed further, as considered appropriate to the measures implemented.



EMISSION TYPE	EMISSION SOURCE	TOTAL tCO2e PER YEAR	TARGET (tCO2e/YEAR)		
			2023	2025	2030
Scope 1	Oil/gas use	4.18	4.03	3.73	2.98
Scope 2	Electricity or heat/steam purchased	35.96	34.67	32.10	25.68
	Water use and waste water removal	0.82	0.79	0.73	0.59
Scope 3	Waste disposal	0.09	0.09	0.08	0.06
	Business travel	1.88	1.81	1.67	1.34
	Employees commuting	23.03	22.20	20.56	16.45
	Employees working from home	16.53	15.94	14.76	11.8
	Procurement	25.77	24.85	23.01	18.41
Total Emissions		108.24	104.75	96.99	77.59



IMPLEMENTATION PLAN

EMISSION SOURCE	SHORT TERM	LONG TERM
Gas Emissions	<ul style="list-style-type: none"> • Install a smart meter to monitor gas usage at Devon House 	<ul style="list-style-type: none"> • Hold discussions with the landlord to use greener suppliers • Offset remaining gas emissions
Electricity Purchased	<ul style="list-style-type: none"> • Install smart meters to monitor electricity use at Devon House • Evaluate and improve energy saving measures, such as automatic timers for lighting and appliances 	<ul style="list-style-type: none"> • Hold discussions with the landlord to use 100% renewable electricity • Offset electricity if unable to move to renewables
Water Use and Wastewater Removal	<ul style="list-style-type: none"> • Install smart meters to monitor water use at Devon House • Inform staff and students of water-saving measures 	<ul style="list-style-type: none"> • Discuss with landlord options for low-flow sanitary fittings
Business Travel	<ul style="list-style-type: none"> • Reduce unnecessary travel and consider video-conferences as alternatives 	<ul style="list-style-type: none"> • Move to using a single travel agency, who can homogenise data for all business travel on NCH's behalf • Offset any business travel emissions

EMISSION SOURCE	SHORT TERM	LONG TERM
Waste Disposal	<ul style="list-style-type: none"> Educate staff and students on recycling importance and categories, making use of sustainability dates such as Earth Day 	<ul style="list-style-type: none"> Increase proportion of waste recycled Consider plastic offsetting as an additional way to reduce impact of waste
Employees commuting	<ul style="list-style-type: none"> Discourage use of cars by staff and students and advocate for walking, cycling and public transport, again making use of sustainability dates such as Earth Day Encourage staff to make use of NCH's cycle to work scheme 	<ul style="list-style-type: none"> Research offsetting options for employee commuting emissions
Employees working from home	<ul style="list-style-type: none"> Advocate for green tariffs, individual offsetting and heating just one room not the whole house when WFH 	<ul style="list-style-type: none"> Yearly survey on employee work from home habits, for carbon reduction monitoring
Procurement e.g. paper,	<ul style="list-style-type: none"> Encourage paper-saving among staff and students when printing Encourage use of plant-milk over dairy-milk across Devon House campus Request mostly in-season fruit from fruit supplier 	<ul style="list-style-type: none"> Develop a sustainable purchasing policy, which outlines only buying A-rated technology appliances, products with an environmental product declaration certificate and FSC certified paper





DECLARATION

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:

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Date:



NCHLondon



@NCHLondon



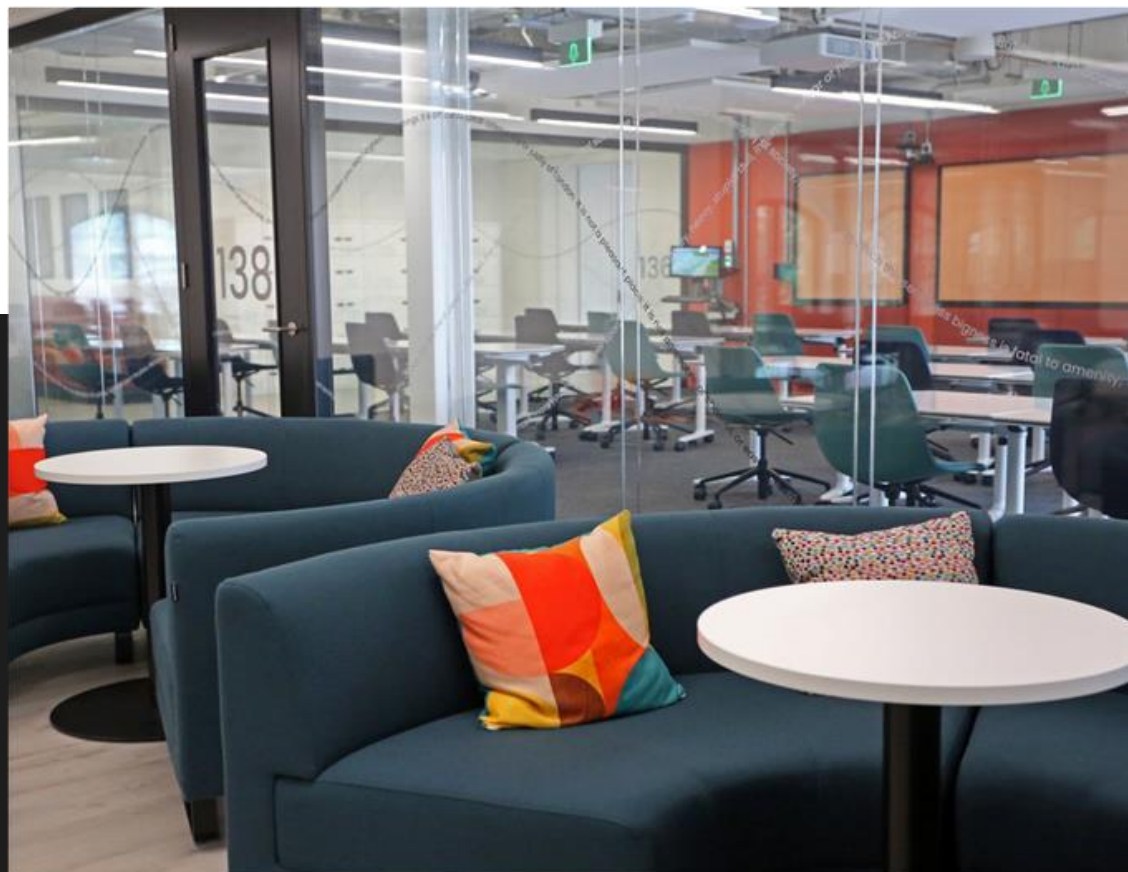
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