Selkirk House, 1 Museum Street

Planning Submission Ref: 2021/2954/P

The Carbon Case for Retention and Retrofit

on behalf of

Save Museum Street
Climate Emergency Camden

15 March 2023

Save Museum Street is a cross community coalition of the following amenity and community organisations:

The Bedford Estates
The Bloomsbury Association
The Covent Garden Community Association
The Covent Garden Area Trust
The Seven Dials Trust
Save Bloomsbury
The Soho Society
Leicester Square Association
South Bloomsbury Tenants' and Residents' Association
Dudley Court Tenants' Association
Tavistock Chambers Residents' Association
Grape Street Residents
Drury Lane Residents
Willoughby Residents' Association
Climate Emergency Camden

This Report is prepared by Targeting Zero LLP

Contents:

1. **Report Summary:**

1.1. This report examines the Whole Life Carbon impacts of the proposed demolition of the existing Selkirk House, 1 Museum Street, and its replacement with a new and significantly larger tower development.

1.2. It is this report's contention that:

1.2.1. That the proposed demolition is, in carbon terms, against UK National Policy, GLA Policy and intentions, and Camden's declared climate and ecological emergency and its resulting policies and intentions. *(see Sections 3, 4 and 5 for details)*

1.2.2. That there is ample policy at a national, GLA and local level to justify Camden rejecting this application. *(see Sections 3, 4 and 5 for details)*

1.2.3. Camden must decide what they believe in. Do they decide in favour of achieving net zero at a faster pace than the UK Government as they claim, or do they decide in favour of the developers whose proposal is to optimise site value with no serious regard for climatic or carbon impacts?

1.3. This report specifically highlights several basic errors and inaccuracies described as 'Problems' with this submission which include:

1.3.1. Failure to meet Camden's own sustainability commitments.

1.3.2. Incorrect assumptions leading to incorrect and misleading carbon assessments.

1.3.3. Errors in the Carbon assessments.

1.3.4. Inaccurate retrofit/new build comparisons

1.3.5. Inaccurate claims about the circular economy.

Please note that various acronyms are used within this document:

DAS = Design and Access Statement
ESG = Environmental and Social Governance
GLA = Greater London Authority
GIA = Gross Internal Area
LETI = London Energy Transformation Initiative
PRI = Principles for Responsible Investment
RIBA = Royal Institute of British Architects
TCFD = Task Force for Climate Related Financial Disclosures
WLC = Whole Life Carbon
WLCA = Whole Life Carbon Assessment

Principle Documents Examined in the Preparation of this Report for 1 Museum St – Selkirk House:

- Design and Access Statement – September 2022
- Retention and redevelopment Options Review and WLC Comparison - February 2023
- Whole Life Carbon Assessment Report 2022
- 1 Museum Street GLA Spreadsheet V5.
- Circular Economy Statement – September 2022
- Policy Documents as indicated.

2. Key Problems with the Planning Application:

Problem 1: Failure to meet Camden Sustainability Commitments:

Point 1: NET ZERO: Camden Context.

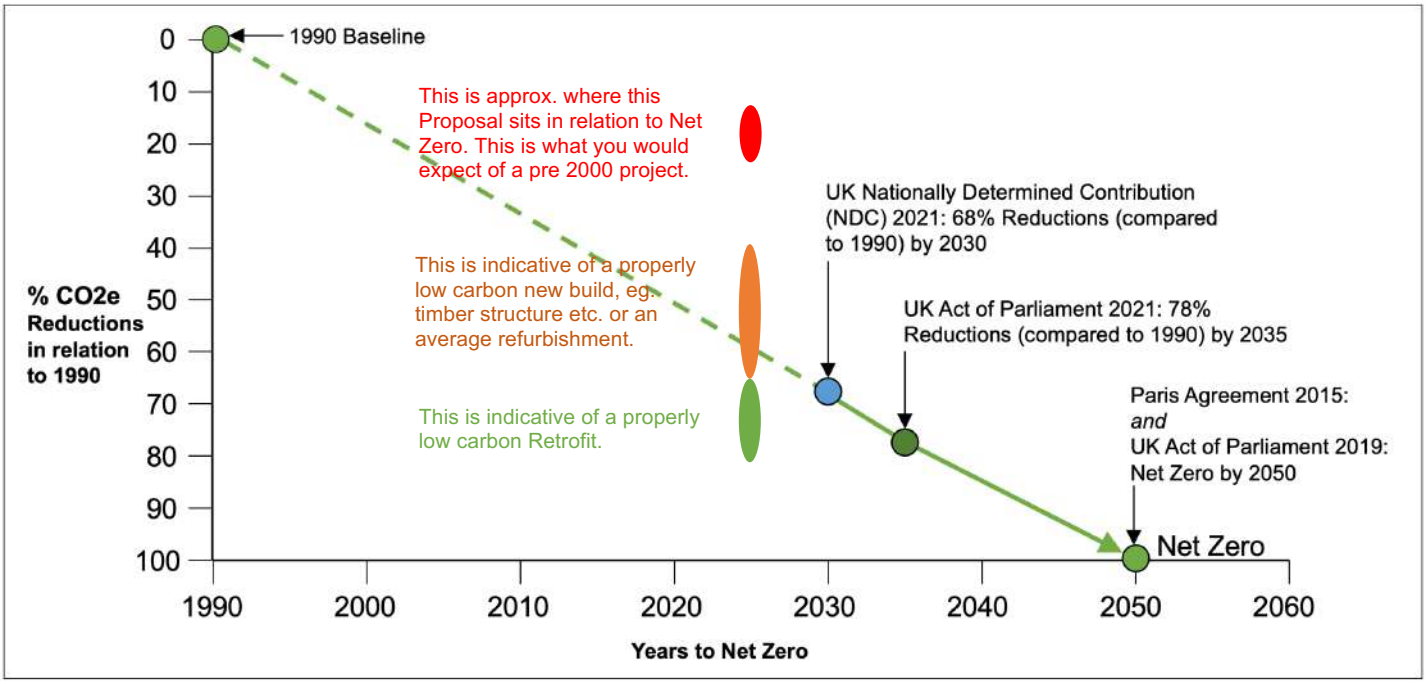
Camden Aspirations & Sustainability Commitments

Acknowledge the need to **act now** on the **climate and ecological emergency** → If Camden is *'acting now'* on the '*climate and ecological emergency*', then it should not be approving this scheme. As it is not consistent with this aspiration. (See diagram below Net Zero, UK Context).

Achieve a **Net Zero Carbon Borough** by **2030** → This scheme is not contributing to the achievement of Net Zero, quite the reverse, it is actively maximising the carbon emissions for this site.

Points 2: NET ZERO: UK Legislative Context.

This diagram illustrates where the proposed new Museum St development sits in relation to the Governments 1990-2050 trajectory to Net Zero. Above the line is **BAD**, as you are performing worse than the trajectory, below the line is **GOOD**.



The proposed scheme exceeds UK legislative targets.

Problem 2: Major Discrepancies in Carbon Assessments.

This is an examination of the discrepancies between the original **'Old Scheme'** 2021 Carbon Assessment and the **'New Scheme'** 2023 Carbon Assessment.
The following is a summary of the key areas, and carbon figures from the GLA matrices for both 2021 and 2023:

	Old Scheme 2021	New Scheme 2023	
Total m2:	30,267	34,943	m2
Construction Carbon: Modules A1-A5	19,850,427	28,211,210	kgCO2e
Embodied Carbon: Modules A-C	29,639,125	45,230,617	kgCO2e
Operational Carbon: Modules B6-B7	76,251,829	18,199,010	kgCO2e
Total Whole Life Carbon	105,890,954	63,429,627	kgCO2e
Embodied Carbon per m2	979	1294	kgCO2e/m2

Issues of Note:

1. The Area of the **New Scheme is 15% larger than the Old Scheme**.
2. The Construction Carbon of the **New Scheme has increased by 42%** compared to the Old Scheme. This is much more that the rise in area and is very high for a building of this type.
3. The Embodied Carbon (life-time material/transport related emissions) of the **New Scheme have increased by 52%** compared to the Old Scheme. This vastly more than the area increase, and points to a very poor embodied carbon scheme.
4. The Operational Carbon in Use (energy and water) for the **New Scheme** has **reduced by 76%.** This may seem impressive, but how is this huge reduction achieved given that the new scheme is now **15% larger**? This figure does not seem credible and undermines the reliability of the figures in general. There is no statement to suggest that this difference can be partially explained by grid decarbonisation. This figure really needs to be third party verified.
5. The carbon cost per m2 of the **New Scheme** has gone up by **32%** compared to the Old Scheme. The new figure is exceptionally high and **outside LETI / RIBA / GLA Aspirational Targets**.

By every measure this scheme performs **significantly worse** in embodied and 'upfront' or construction emissions than the original scheme. The operational emissions do show a **76%** improvement in energy use related emissions, but this is not credible given that this is essentially the same scheme and is **15% larger**.

These figures are very poor in relation to similar schemes and the operational energy reduction of 76% needs detailed third party verification.

Problem 3: Failure to meet LETI, RIBA, and GLA Carbon Targets.

The proposed scheme **FAILS** against **LETI, RIBA and GLA Whole Life Carbon Benchmarks.** NB: LETI recommend prioritising Retrofit over New Build

Benchmark	Embodied Carbon (Modules A1-A5)	Modules A-C (excluding B6 & B7)
LETI Baseline	1000 $kgCO_2e/m^2$	n/a
LETI 2020	<600 $kgCO_2e/m^2$	n/a
LETI 2030	<350 $kgCO_2e/m^2$	n/a
RIBA Business as usual	n/a	1400 $kgCO_2e/m^2$
RIBA 2025	n/a	<970 $kgCO_2e/m^2$
RIBA 2030	n/a	<750 $kgCO_2e/m^2$

Table 4- Additional Benchmarks
From WLC Report Sept 2022 Rev01

FAIL: Proposal Modules A1-A5 figure exceeds **LETI** and **GLA** aspirational Targets

FAIL: Proposal Modules A-C figure exceeds **RIBA** and **GLA** Targets

	GLA Target	Proposal
Indicator	Aspiration	Achieved
Embodied Carbon (Modules A1-A5)	<600 $kgCO_2e/m^2$	**807.3** $kgCO_2e/m^2$
Modules B-C (exc. B6 & B7) (Office)	<370 $kgCO_2e/m^2$	**502.4** $kgCO_2e/m^2$
Modules A-C (exc. B6 & B7; inc. sequestered carbon)	<970 $kgCO_2e/m^2$	**1294.4** $kgCO_2e/m^2$

From WLC Report Sept 2022 Rev01. Diagram shows GLA Aspirational levels which equate to:

- *LETI: 2020 Modules A1-A5*
- *RIBA: 2025 Modules A-C*

This diagram shows the achieved figures for the Proposal for Modules A1-A5, and Modules A-C, in relation to LETI, RIBA and aspirational GLA Targets.

This Proposal exceeds all these carbon targets to a significant degree.

In addition, there is a totally inaccurate claim in the GLA Reporting matrix as follows:
"Roughly 75% of development by GIA is refurbishment and existing elements….."

This is incorrect, as the New Build is approx. 66% of the development by GIA.

Problem 4: Inaccurate comparison Retrofit and New Build.

Point 1: Inaccurate comparisons

Refurb. Option

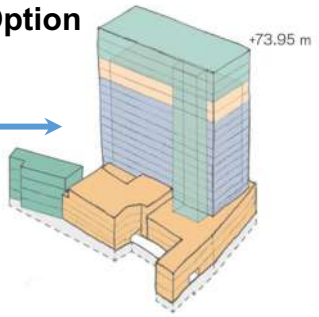
Option 3 is shown as the most carbon efficient option /m2. The Whole Life Carbon figure for this option is approx.1020kgCO2e/m2

This is the level of figure you would expect of a typical new build, not a major refurbishment, because a large proportion of the structure is being retained and reused.

The orange area (ramps, hotel) does not need to be fully demolished. Selective demolition would achieve a much lower carbon outcome. 3rd Party Verification.

Why isn't **Option 2** a lot less in both tCO2e, and kgCO2e/m2 compared to **Option 3**?

Option 2 is a less extensive and less complex scheme yet is higher in terms of carbon efficiency compared to **Option 3**. This needs 3rd party verification.

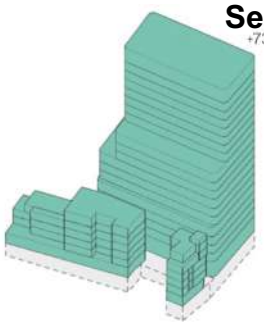


Option 3
Partial Retention and extension

Retain existing building structure to level 13 and extend these existing floor plates by 800mm; demolition of two top floors and replacement with 5-storey new build extension

- Demolish two storeys above level 14
- Add 5no. new storeys
- Extend typical slab edge by 800mm
- Adjust existing cores as needed / potential to introduce new stair core (external)
- Demolish car park area and build new structure
- Demolish lower levels along High Holborn and build new incorporating a new passageway (Vine Lane)
- Recladding the existing facade
- Renew all MEP services
- New residential building along West Central Street

Selected New Build



Option 4
Basement retention and new build (planning submission)

New build above ground to replace existing Selkirk House and NCP car park to deliver office, class E and residential accommodation alongside public realm improvements

- Retain Selkirk House basement structure as much as practicable possible
- Demolish existing Selkirk House and NCP car park
- New set of buildings - One Museum Street, High Holborn and Vine Lane Buildings providing office and residential accommodation - alongside public realm improvements

The Whole Life Carbon figure is 1294kgCO2e/m2.

This is a very high figure for a new commercial office building and suggests inefficient resource and carbon choices.

Diagrams from Retention Options Review p27

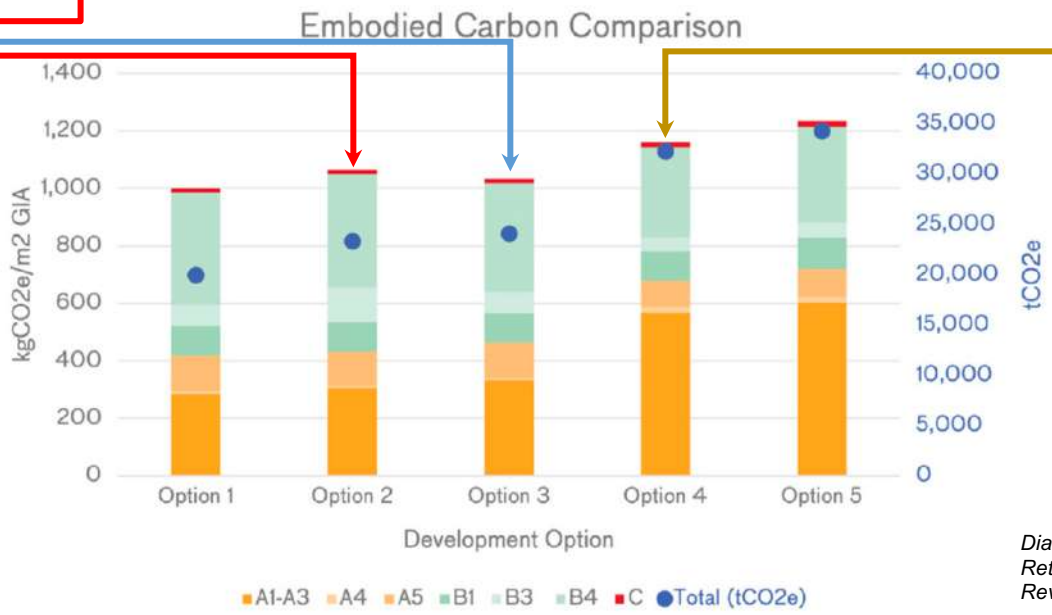


Diagram from Retention Options Review p10

Point 2: Subjective use of Criteria

This table purports to show rankings in terms of a list of criteria. The first 9 criteria are ranked entirely subjectively, no doubt to provide support for demolition. The last three criteria are based on numbers and tell the true story, although the last item is based on incorrect assumptions, see notes below:

Table from Retention Options Review p38

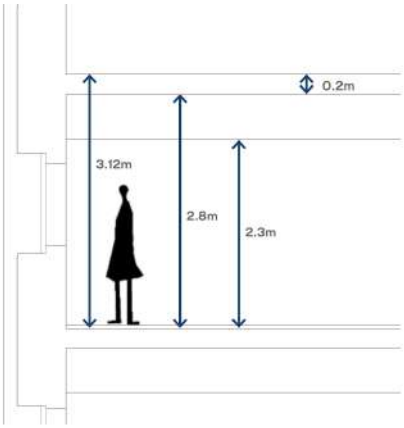
	Option 1 Maximum retention and retrofit (no extension)	Option 2 Maximum retention and extension	Option 3 Partial Retention and extension	Option 4 Basement retention and new build (planning submission)	Option 5 New Basement and new build
Efficient Use of Land	5	4	3	2	1
Construction Impacts	1	2	3	4	5
Space Quality	3	5	4	1	1
Ground floor activation	5	4	3	1	1
Employment capacity uplift	5	4	3	1	1
Public realm enhancements	5	4	3	1	1
Housing offer	5	4	3	1	1
Future flexibility	5	4	3	2	1
Long Term Economic Sustainability and Planning Benefits	4	5	3	2	1
Whole Life Carbon per m2	2	3	1	4	5
Total Embodied Carbon per m2 (RICS methodology)	1	3	2	4	5
Operational Carbon per m2	5	3	3	1	1

The top nine criteria are entirely subjective and should be treated with a great of suspicion. They are intended to show the new build in the best possible light in relation to the refurbishment options, and also to overshadow the bottom 3 items.

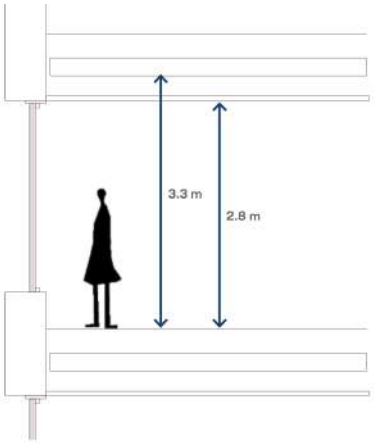
The numerical assessments show the true picture, ie that **Option 3** is the best option in terms of **'Whole Life Carbon /m2'**. Whole Life Carbon includes all carbon emissions. The only reason Option 3 is not also '1' for 'Total Embodied Carbon per m2' is because the 'light touch' (ie 'lick of paint') Option 1 is lower but can probably be discounted as very inefficient in both environmental and investment terms.

The **Option 3** figures are only 2.5% more than the **Option 4** (and 5) figures. This is well within the margin of error for this type of assessment and therefore they are effectively the same. Therefore the '3' ranking is misleading and should also be a '1'

Point 3: Floor to Ceiling heights:



Existing Building – Typical Section



Market Expectations – Typical Section (BCO Guidelines)

Diagrams from Retention Options Review p53

- These show local sections through the existing building (on the left) and through the proposed new build (on the right).
- The existing section shows a finished floor/ceiling height of 2.3m. This assumes a ceiling plus void of 500mm. This is excessive for offices, which today usually avoid ceilings and have exposed services. The BCO Guide allows for refurbishment floor to ceiling heights to be between 2.45m and 2.8m. This could meet this requirement with the right design solution. Therefore, this is misleading.
- The existing section overall floor to ceiling height of 2.8m, originally designed for office use (Trusthouse Forte) and then converted for hotel use, could now be residential or other use, particularly for Option 3 where the new floors/facade could include balconies. The existing Floor to ceiling heights would be fine.

Point 4: The Car Park:

1. Selkirk House - Structural Elements

The existing Selkirk House building is formed of five constituent parts each with a different structural approach to framing.

1: Basement
2: Car Park
3: Hotel: Podium
4: Hotel: Typical Floors
5: Hotel: Upper Floors

The Post Tunnels (6) run below the site.

Much is made of the car park ramps (blue) as being a major reason for demolition. However as can be seen they do not cover the whole site, and therefore could have a limited impact even if demolition is required. What is required is positive and creative design intent for the use of these car park areas.

The car park is therefore not a determining factor for demolition.

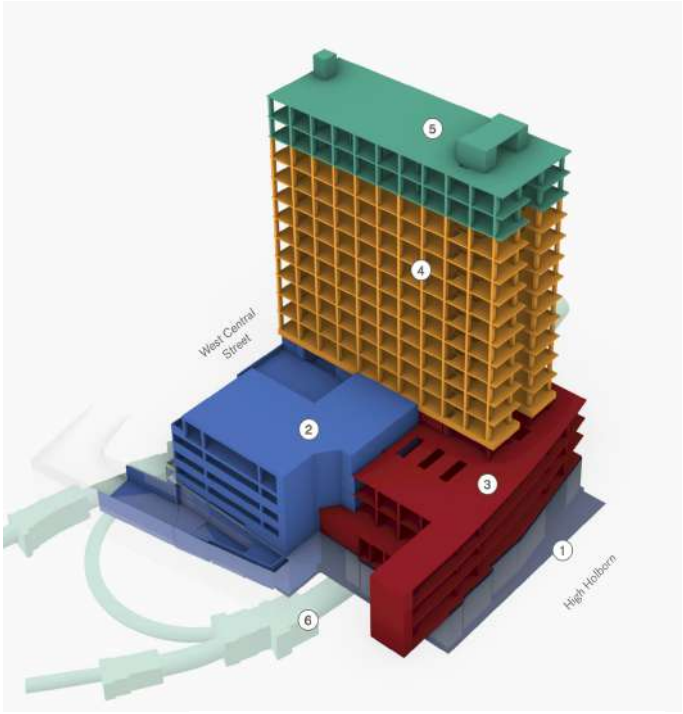


Diagram from Retention Options Review p45

Problem 5: The Circular Economy – inaccurate claims.

The Circular Economy Statement (Sept 2022 Rev 01) makes a number of claims (extract below). The design is very standard with NO evidence of special design measures to ensure a circular outcome. Ironically the most 'circular' action that could be taken to '*design out waste*', '*minimise materials used'* and to '*reuse where possible'* would be **to retain and reuse the existing building**.

Circular Economy

The site will aim to consider the full life cycle of the buildings in its approach by following the six circular economy (CE) principles throughout the design and construction process. The six fundamental principles, as outlined in the GLA guidance document, support and underpin the structure and content of the Circular Economy Statement that accompanies the application.

The aim is for the following to be achieved by the Site:

- The development will apply the six CE principles, including designing for disassembly and adaptability.
- The design will aim to minimise materials used on site, through designing out waste and reuse where possible. Material reuse on site and/or recycling will be maximised.
- The development will aim to reduce and minimise the use of energy and natural resources where possible.
- Procurement of materials and other resources will be done responsibly and sustainably, with local products prioritised where possible to reduce transport to and from site.
- The development will be designed to maximise its life cycle where possible. The development will also be designed to be as adaptable or flexible as possible and optimise the chances of reusability and recoverability.
- The Site will aim to minimise all construction, demolition, excavation, and municipal waste throughout the development.

Too early to tell, Camden should condition details of designing for disassembly and adaptability as the project progresses.

This misses the obvious point that the best way to '*design out waste*', '*minimise materials used'* and to '*reuse where possible'* would be by NOT demolishing, and by reusing the existing building. Aluminium curtain walling (as designed) is a relatively short life facade, leading to multiple replacements over the buildings service life. This is highly wasteful. Anodizing inhibits recycling.

This reference to energy is not really relevant to the circular economy.
Are they proposing to '*reduce and minimise… .natural resources where possible'*? This is what has been said!

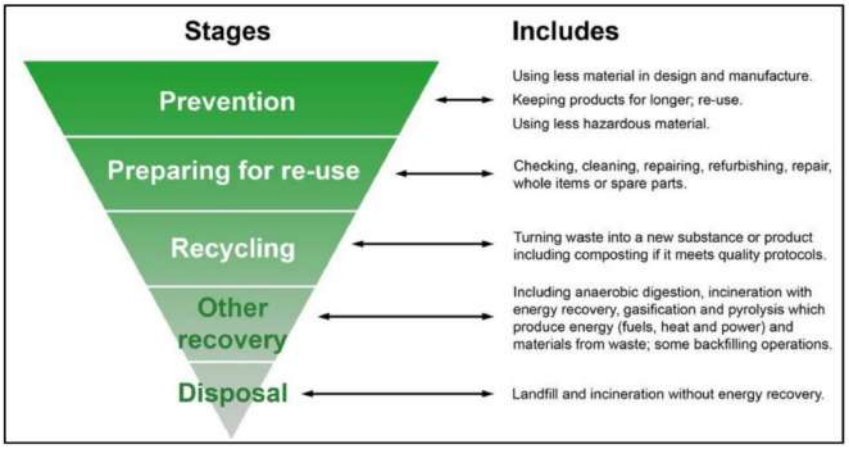
Aluminium, the majority facade material is NOT a local material, it is NOT responsibly or sustainably sourced, and will NOT reduce transport emissions.

There is no evidence for example to ensure that special measures have been taken with respect to the facade design to: '*optimise the chances of reusability and recoverability',* or to *'maximise life cycle',* or to *'ensure that it is as adaptable or flexible'* as possible. What has been designed is a routine aluminium curtain walling facade solution. These claims should be conditioned.

This is obviously an absurd claim as the design solution actually maximises *'construction, and demolition'* waste.

This diagram is from The Circular Economy Statement (Sept 2022 Rev 01)

The Prevention Stage has been ignored.



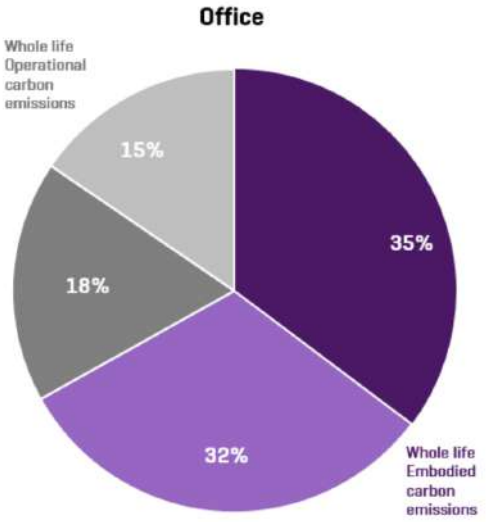
3. UK Political Context

3.1. The UK national political context is to achieve a 'Net Zero' carbon economy by 2050. This was passed by parliament in 2019 as a legally binding amendment to the Climate Change Act of 2008. This commitment was further updated in April 2021 by creating an interim commitment of achieving 78% carbon reductions by 2035 and a commitment by the UK to achieve 68% Reductions by 2030.

3.2. The built environment sector is generally held to be responsible for some 40% (*World Green Building Council*) of global CO_2 and other Greenhouse Gas (GHG's) emissions and therefore there is particular pressure on the built environment to significantly and rapidly reduce carbon emissions. To achieve 78% of reductions by 2035 means that schemes under consideration today already need to be making significant reductions in their overall whole life carbon footprint. The RIBA's 2030 Climate Challenge sets out interim targets for this. Avoiding demolition, and encouraging retrofitting is however a priority.

3.3. Under the UN's Greenhouse Gas Protocol 'operational' ie energy use emissions are covered under Scope 1 emissions ('*direct emissions' as in the use of petrol)* and Scope 2 emissions ('*energy indirect' as in bought electricity*) with 'embodied' emissions covered under Scope 3 emissions (*purchased goods and services, which includes construction*). 'Embodied' carbon emissions (Scope 3) include the carbon emissions from the sourcing of materials, the fabrication into products and systems, the installation and construction processes, and then after completion, the maintenance, repair, and replacement of components, and finally emissions from demolition and disposal. The UK Government's objectives are to reduce Scopes 1, 2 and 3 emissions as far as possible through positive action before the inclusion of offsetting to achieve 'net zero'.

3.4. The GLA's Policy SI2 Defines WLC as follows: "*WLC emissions are the total carbon emissions resulting from the construction and the use of a building over its entire life, including its demolition and disposal. They capture a building's operational carbon emissions from both regulated and unregulated energy use, as well as its embodied carbon emissions - that is, emissions associated with raw material extraction, the manufacture and transport of building materials, and construction; and the emissions associated with maintenance, repair and replacement, as well as dismantling, demolition and eventual material disposal. A WLC assessment also includes an assessment of the potential savings from the reuse or recycling of components after the end of a building's useful life. It provides a true picture of a building's carbon impact on the environment.*"



Speculative office building with Cat A fit out; central London

This diagram shows the relationship between embodied and operational emissions for a typical new office building over 60 years.

Dark Purple – Embodied emissions from Construction
Light Purple – Embodied emissions in use
Dark Grey – Operational Emissions – Regulated: Heating/lighting/cooling
Light Grey – Operational Emissions – Unregulated: Small power

Extract from RICS Professional Statement – Whole Life Carbon Assessment for the Built Environment – 2017, page 3. Diagram assumes grid decarbonisation.

3.5. In December 2020 the Committee on Climate Change (CCC) published the 6th Carbon Budget which requires a 68% reduction in all carbon emissions compared to 1990 by 2030, 78% reduction by 2035, and 100% reduction by 2050.

3.6. HM Government has backed up its intentions with the following guidance, 'The Construction Playbook', published in December 2020 which says that its use will create the right environment to:

3.6.1. *"Take strides towards our 2050 net zero commitment and focus on a whole life carbon approach to fight climate change and deliver greener facilities designed for the future".*

3.6.2. And that: *"contracting authorities should adopt the use of whole life carbon assessments to understand and minimise the GHG emissions footprint of projects and programmes throughout their lifecycle."*

3.7. Many Local Authorities, including Camden, have declared a Climate Emergency with some now actively pursuing low/zero 'whole life carbon' policies. For example, the Greater London Authority is, in the new London Plan, requiring all referable schemes to undertake a full 'whole life carbon' (i.e., operational and embodied emissions over the buildings entire life cycle) assessment at planning submission, and with an 'as built' update post completion.

3.8. The National Planning Policy Framework (NPPF) 2021, Chapter 14, 'Meeting the challenge of climate change, flooding and coastal change' Para 152,

states that: "*The planning system should support the transition to a low carbon future in a changing climate.....*". Further; "*It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings."*

The proposal for this site clearly does not "*contribute to radical reductions in greenhouse gas emissions"* nor does it *"encourage the reuse of existing resources, including the conversion of existing buildings".* (See Problem 2 above)

3.9. In June 2021, the Committee on Climate Change published their Joint Recommendations Report to Parliament which calls for: "*Setting out a plan for phasing in mandatory whole-life reporting followed by minimum whole-life standards for all buildings, roads and infrastructure by 2025*".

3.10. The UK Government's **'Net Zero Strategy: Build Back Greener',** by the **Department for Business, Energy and Industrial Strategy (BEIS) 2021** includes:

3.10.1. "*Government is committed to moving to a more circular economy. This means keeping built assets, products, and materials in use for longer, including through repair and reuse, and making greater use of secondary materials, thus reducing waste arising*."

3.10.2. "*Resource efficiency measures reduce emissions from industrial processes by keeping products and materials in circulation for longer by way of reuse, repair, remanufacture and recycling as well as reducing material usage. These activities enable the retention of value, and in some cases the creation of new value for both the producer and customer, at a much-reduced environmental impact.*"

3.11. In May 2022 **the Environmental Audit Select Committee (EAC)** produced the Report: 'Building to Net Zero: Costing Carbon in Construction'. In this Report it states:

3.11.1. "*The written evidence we received presented a broad consensus that retrofit and reuse of existing properties was substantially more effective at conserving carbon than demolition and new build, even when the new construction used lower carbon materials"*.

3.11.2. "*Considerable emissions are involved in demolition and rebuilding of properties, especially when measured under a whole-life carbon approach: under this approach, it becomes more debatable whether the replacement of properties is a sustainable approach to take*."

3.11.3. *"The evidence we received consistently recommended that retrofit and reuse be prioritised over new build in order to conserve resources, reduce waste, minimise embodied carbon emissions...."*

3.11.4. *"The Chartered Institute of Buildings (CIOB) noted that even when using lower carbon materials to construct new building, this approach was less effective at conserving energy than reusing or repurposing existing buildings".*

4. The GLA London Plan:

4.1. The GLA's London Plan, published in 2021 includes several policies specific to the Circular Economy and Whole Life Carbon emissions as outlined below that have not been complied with in the submission for 1 Museum Street.

4.2. In April 2020 in: 'The Climate Emergency: Extreme Weather and Emissions', The London Assembly; states: "*The Mayor declared a climate emergency shortly after the Assembly and in early 2020, set a target for London to be net zero- carbon by 2030*". This requirement is significantly more demanding than the Government's net zero target of 2050. This therefore puts greater pressure on developers to reduce emissions at a faster rate than the UK legal commitments. The Proposal for 1 Museum Street is in fact worse than the UK's trajectory to Net Zero by 2050. (see Problem 1)

4.3. London Plan Policy SI2; Principles for reducing WLC emissions Table 2: *"Before embarking on the design of a new structure or building, the retrofit or reuse of any existing built structures, in part or as a whole, should be a priority consideration as this is typically the lowest carbon option. Significant retention and reuse of structures also reduces construction costs and can contribute to a smoother planning process.*"

4.4. Policy SI7 London Plan Guidance: Circular Economy Statements: Item 1.1 What is a circular economy? Item 1.1.3, P5: The guidance explains how to prepare a Circular Economy Statement and *"also includes guidance on how the design of new buildings, and prioritising the reuse and retrofit of existing structures, can promote CE outcomes. Further, London Plan Policy D3 requires all development to aim for high sustainability standards, and to take into account the principles of the circular economy*".

4.5. Policy SI7 London Plan Guidance: Circular Economy Statements: Item 2.4.2, page 12, states the following: "*retaining existing built structures totally or partially should be prioritised before considering substantial demolition, as this is typically the lowest- carbon option*".

4.6. London Plan: Chapter 1, Planning London's Future - Good Growth; GG6, Increasing Efficiency and Resilience, Item 1.6.2, p25: "*Creating a low carbon circular economy, in which the greatest possible value is extracted from resources before they become waste, is not only socially and environmentally responsible, but will save money and limit the likelihood of environmental threats affecting London's future*."

4.7. The London Plan Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments, Item 1.2.3, p3: "*Designing a development that follows a WLC approach will: achieve resource efficiency and cost savings, by encouraging refurbishment, and the retention and reuse of existing materials and structures, instead of new construction*".
This recognizes that the best way to reduce carbon emissions in the built environment is to retrofit rather than to build new.

4.8. The existing Selkirk House is a substantial and robust structure that in the context of the climate crisis should not be seen as beyond economic reuse. The West End of London has some of the highest real estate values on the planet, it must therefore be possible to find an environmentally effective solution to this site that is also economically viable. This may not produce the maximum profit that the demolition/new build might produce, but it will be more appropriate in respect of UK, GLA and Camden policies.

The existing Selkirk House, 1 Museum Street. A robust and substantial structure capable of beneficial reuse and repurposing, thus avoiding the demolition that would contribute to the climate crisis.

4.9. GLA London Plan Policy SI7 Reducing Waste and the Circular Economy has at its core, 'reuse' and 'waste reduction'. The demolition of Selkirk House avoids reuse and produces significant waste to be transported (with associated CO_2e emissions) from the site and is therefore entirely at odds with Policy SI7.

5. London Borough of Camden Carbon Policies:

5.1. In 2019, Camden declared a climate and ecological emergency and held the UK's first Citizens' Assembly on the Climate crisis. This democratic exercise agreed the requirement that: *"Developers to fund energy efficient retrofits of old buildings"* supported by 86% of the Assembly. Whilst this is not a direct instruction for schemes of this type, it does demonstrate a clear democratic support for retrofit.

5.2. As detailed in the original Targeting Zero document dated Autumn 2021, reference was made to Camden's Declaration of a Climate Emergency and numerous other policy statements that prioritise retrofit over new build (*these are detailed in Sections 5.3 - 5.6*) eg:

5.2.1. Camden Local Plan 2017
5.2.2. Camden Policy CC1 Climate Change Mitigation
5.2.3. Camden's Climate Action Plan
5.2.4. Camden Planning Guidance – Energy Efficiency and Adaptation Jan 2021:
5.2.5. And the Design Review Panel 22nd November 2019:

There is no explanation from either the developer or Camden as to why Camden's climate declarations and associated policies have been so comprehensively abandoned in this submission.

Do the voters of Camden understand that the Planning Committee is prioritising development over climate change?

5.3. **Camden Local Plan 2017** States:

5.3.1. Item 8.3:

> *"Any new development in Camden has the potential to increase carbon dioxide emissions in the borough. If we are to achieve local, and support national, carbon dioxide reduction targets, it is crucial that planning policy*

limits carbon dioxide emissions from new development wherever possible and supports sensitive energy efficiency improvements to existing buildings."

5.4. **Camden Policy CC1 Climate Change Mitigation** states, we will:

- *"support and encourage sensitive energy efficiency improvements to existing buildings"*

- *"require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building"* As noted above this has not been demonstrated.

- *"expect all developments to optimise resource efficiency"* This is not the case with this proposal as demolition and rebuild clearly does not *"optimise resource efficiency".* Quite the reverse, as for this site, the demolition proposal maximises waste, and the new build absorbs significant new resources.

5.5. **Camden's Climate Action Plan** States:

5.5.1. "*In 2020, deliver a Retrofit Summit for residents, businesses and community groups to develop our understanding of the retrofit challenge*".

This demonstrates the seriousness with which Camden is taking Retrofit as a standard approach.

5.5.2. *"By 2021, introduce a new requirement for all future Community Investment Programme development to include a lifecycle carbon impact assessment (retrofit versus new-build) as part of the pre-feasibility appraisal."*

If this is a requirement for 'Community Investment Programme development', surely the same should apply to external developers. This should be specifically required for this site.

5.6. **Camden Planning Guidance – Energy Efficiency and Adaptation Jan 2021:** Under 'Reuse and Optimising resource Efficiency' the 'Key Messages' include:

5.6.1. *"We will expect creative and innovative solutions to repurposing existing buildings and avoiding demolition"*. This has not been demonstrated.

5.6.2. *"All development should seek to optimise resource efficiency and use circular economy principles".* This has not been demonstrated.

5.6.3. Item 9.1 states:

"Retaining the resource value embedded in structures is one of the most significant actions you can take to reduce waste and material consumption" (Green Construction Board, Top Tips for Embedding Circular Economy Principles in the Construction Industry). This has not been acted on.

5.6.4. Item 9.3 states:

"Reusing buildings helps developers and the wider community to understand the environmental, social, and heritage value of a site. Benefits of retaining and refurbishing buildings:

- *Reduces the requirement for virgin materials and therefore reduces its embodied carbon impact;*
- *keeps products and materials at their highest value for as long as possible;*
- *maintains heritage value;*
- *minimises demolition waste;"*

5.6.5. Item 9.4 states:

"In assessing the opportunities for retention and refurbishment developers should assess the condition of the existing building and explore future potential of the site. The New London Plan highlights the importance of retaining the value of existing buildings with the least preferable development option of recycling through demolition".

5.6.6. Item 9.6 states:

"All options should achieve maximum possible reductions for carbon dioxide emissions and include adaptation measures, in accordance with the Council's Development Plan and this CPG.

- *Refit*
- *Refurbish*
- *Substantial refurbishment and extension*
- *Reclaim and recycle"*

5.6.7. Item 9.6 also includes:

- Refurbish:

"*Refurbishment should seek to significantly improve the service life of the existing building. This option provides an opportunity to retrofit the building to reduce carbon emissions and include sustainable adaptation measures*."

- Substantial Refurbishment and Extension:

  "This option is similar to the above, but takes into consideration the need to optimise site capacity and alter the existing structure to meet future needs. This may involve significant changes to the façade (façade replacement) but should seek to retain as much of the existing building as possible reducing the need to use new materials and reduce the loss of embodied carbon in the existing structure." As noted above this has not been positively explored.

5.6.8. Item 9.7 states:

"This approach is justified through Local Plan policy CC1 which requires all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building." Not demonstrated.

5.6.9. Item 9.8 states:

"It is important to connect all development options to resource efficiency and circular economy principles, outlined in Local Plan policy CC1".

5.6.10. Item 9.9 states*:*

"As noted above the construction process and new materials employed in developing buildings are major consumers of resources and can produce large quantities of waste and carbon emissions."

5.6.11. Item 9.10 states:

"Reducing embodied carbon impacts can result in other additional benefits including: less waste to landfill from efficient construction methods, or improved air quality benefits from reduced transportation and lower costs of development, operation, and maintenance."

This all applies positively to the Retrofit approach.

5.7. Design Review Panel 22nd November 2019:

5.7.1. The Summary, first paragraph, states:

> *"At a strategic level, the panel asks for justification as to why little of the existing buildings are retained – and highlights the 'carbon cost' of removing one concrete frame and replacing it with another."*

5.7.2. This comment is repeated under the Sustainability section, but as noted above has not been comprehensively and positively explored.

6. The Project Team

6.1.1. International Investment organisations such as the TCFD, PRI (see p4) and the Bank of England are all prioritising the requirement that 'Climate Risk' should be included within any investment strategy. Investments that are not 'climate clean' will be seen as high-risk investments. Buildings or Projects that are climate clean will therefore have the advantage in value terms over those that are not. Occupiers will start to shy away from buildings that are not climate clean. Climate related obsolescence will become a significant investment concern. The demolition and new build epitomise these concerns.

6.1.2. The **developer** of this site **Simten** has no sustainability policy evident on their website. This is unusual as the major UK developers have specific and detailed sustainability policies that are in many cases ahead of national or local requirements. The assumption therefore must be that sustainability and carbon reduction are not a priority issue for them, and it is therefore likely that they would prefer to do the absolute minimum required by Camden in this regard, and potentially to find ways to avoid meeting Camden's policies and intentions in this area.

6.1.3. **The Investor BC + Partners** claim on their website to subscribe to PRI and TCFD above, and state the following in their ESG Policy:

- *"In the light of anthropogenic climate change, which presents the greatest long term risk of any ESG factor we will review climate risk (physical and transitional) in every transaction. Further we will disclose these risks within the TCFD framework".*

- *"We will be prudent in the use of scares resources, including energy and water, and maintain circular economy goals in waste management".*

- *"We will attempt to minimise the impact of our operations on the natural world, specifically considering ecosystem disruption and pollution".*

They also state that their ESG Committee will:

- "*Ensure both Environmental and social considerations are incorporated at every stage of the life cycle of developments."*

It is not possible to reconcile these warm words with what is being proposed on this site. They are not "*being prudent with scares resources*", nor are they "*minimising the impact of our operations on the natural world, specifically considering ecosystem disruption and pollution."*

6.1.4. The development team (BC + Partners with Simten) approach appears fundamentally short term i.e. to deliver a profit without concerns about 'collateral' environmental damage.

6.2. **The Architect: DSDHA:** DSDHA are signatories to 'Architects Declare' which recognises that architects need to change how they design to meet the Climate Emergency. Three of the eleven commitments are:

- ***"****Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach"*

- "*Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice."*

- *"Minimise wasteful use of resources in architecture and urban planning, both in quantum and in detail."*

6.2.1. The questions for DSDHA are, have they really understood these commitments? How has this changed their approach for this project?

6.2.2. DSDHA have, with their scheme for the Economist Plaza, demonstrated that they are fully able to retrofit buildings of a similar type and vintage to Selkirk House. As Selkirk House is not Listed, surely there is the opportunity to demonstrate a creative reuse of the existing building that would be compatible with the GLA's and Camden's Policies on prioritising Retrofit, and their own commitments to Architects Declare.

7. The Submission Documents: (See also Section 2 'Problems').

7.1. Design and Access Statement; Rev 01 Sept 2022, 2.11 Retention vs Replacement: The submission states the following:

7.1.1. The submission states*: "These studies were led by hotel use for typical floors in combination with commercial floors at lower levels".* In other words a limited approach to reuse was adopted. Potential residential use

is mentioned but dismissed without any evidence of a comprehensive or creative approach to this and other alternative use types such as recreational or uses suitable to nearby Covent Garden.

7.1.2. The new façade for 1 Museum Street is shown as being in 'Light/dark anodized aluminium" with double glazed units. The double-glazed units have a life expectancy of some 30-40 years, and when these are replaced, it is very probable that the entire aluminium system will need also to be replaced. Anodizing can have a longer life than the D/G units, but it depends on the specification and quality.

Bauxite Mine for producing Aluminium

Proposed Scheme

7.1.3. Anodizing as a coating for an aluminium façade means that to achieve a uniform colour you need to use 100% virgin aluminium rather than using recycled aluminium which tends to give colour variations to the substrate. This means that the carbon cost of such a façade is at its highest and typically cannot be mitigated using recycled content. Has this been reflected in the GLA WLC assessment figures?

7.1.4. For a building of this size and bearing in mind the substantial resources necessary to build it, you would expect it to have a significant life expectancy, in excess of 100 years (as opposed to the 60 year assessment life). As the façade design is given in the GLA assessment as 30 years, this means that over the course of a century the façade, like for like, will have to be replaced 3 times. Is this a sensible architectural approach, and an appropriate environmental legacy for the future?

7.2. Retention Options Review:

7.2.1. As has been noted in Section 2, 'Problems' the *objective* of the options studies appears to be to demonstrate that the building can't be reused so as to ensure maximum demolition rather than adopting a creative approach to reusing and adapting the building with alternative use types (including office use, floor/ceiling heights are within BCO guidlines).

7.2.2. The submission claims that '95%' of demolition waste will be reused/recycled. There is a difference as 'recycled' for example means that waste rubble diverted to motorway hardcore is technically 'recycled' but it is at the lowest level and therefore this is not a claim with any real substance, and not 'reused' in the same way as a steel beam can be directly 'reused'.

7.3. Demolition:

7.3.1. The new build proposal includes significant new structural works below ground level, including basements, new retaining structures, new foundations, etc. The existing substrate is heavily congested with transport and utility tunnels. Despite the provision of the 'Basement Impact and Structural Impact assessment' of 2021, it is probable that this area will need further significant design development and is also therefore likely to have increased carbon costs compared with what has been assumed in the current GLA WLC Reporting Matrix. This will make the reported figures worse.

8. Conclusions:

8.1. There are a number of serious 'Problems' with the new submission for the new build scheme. These are outlined in Section 2 above and call into question the reliability of the WLC assessments and the figures used.

8.2. One of the most obvious 'Problems' is that energy use is claimed to have reduced by 76% between the 2021 submission and the 2023 revision. This is reduction just not credible and casts serious doubt over the submission's figures in general.

8.3. The developer has gone out of their way to demonstrate that the existing group of buildings will not work under a range of options, although refurbishment Options 2 and 3 show possibilities. These two options are however compromised by assessment anomalies and misleading presentation of information, and the comparative review that 'proves' that they are inadequate. The 'issue' of storey heights is exaggerated as the existing building meets BCO office refurbishment guidelines and could also be residential use.

8.4. The comparison of refurbishment options is inadequate and flawed in its methodology. It describes in general terms the conditions and restrictions of

the existing building without fully examining possible solutions. No objective low-carbon retrofit scheme has therefore been developed. This could involve looking at re-use of the car-park and hotel structures, as well as use of the tower for residential use. The options offered contain flaws (intentional?) that undermine their credibility.

8.5. There is sufficient UK national, GLA, and local Camden policy to enable Camden to reject this submission in favour of a major retrofit. This approach would be lower in carbon emissions, result in significantly less waste, and be quicker to market. There are grounds for refusal, but this is a choice for Camden.

8.6. The design Review Panel of the 22 November 2019 asked: *"At a strategic level, the panel asks for justification as to why little of the existing buildings are retained – and highlights the 'carbon cost' of removing one concrete frame and replacing it with another."* This seems to have been completely ignored.

8.7. The London Borough of Camden should require a positive, forward looking architectural proposal and whole life carbon assessment to be produced showing how the existing Selkirk House, 1 Museum Street, can be reused, repurposed, and retrofitted with an open mind on use types to achieve a retrofit option with improved public realm. The central premise should be to retain most of the existing structure and add to or adapt this creatively. This may not produce the level of profit that the submitted proposal will produce, but it will be produced at far less environmental cost.

9. References:

- Application Documents 2021, 2022, 2023.
- Camden Planning Guidance – Energy Efficiency and Adaptation Jan 2021.
- Camden Local Plan 2017.
- Camden Climate Action Plan 2020-2025
- Camden approves ambitious five year Climate Action Plan 11 June 2020.
- London Borough of Camden's Carbon Footprint update for 2019/20
- Camden Citizen's Assembly on the Climate Crisis Sept 2019
- Environmental Audit Select Committee Report – "Building to net zero, cost carbon in construction", May 2022.
- GLA London Plan – Whole Life Carbon Guidance for Policy SI2
- GLA London Plan – Circular Economy Guidance for Policy SI7
- CCC 2021 Report to Parliament
- CCC 6th Carbon Budget December 2020.
- RICS Professional Statement – Whole Life Carbon Assessment for the Built Environment 2017

- ‘End of Life Challenges in Façade Design’ – Rebecca Hartwell
- LETI Climate Emergency Design Guide.
- LETI Embodied Carbon Primer

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