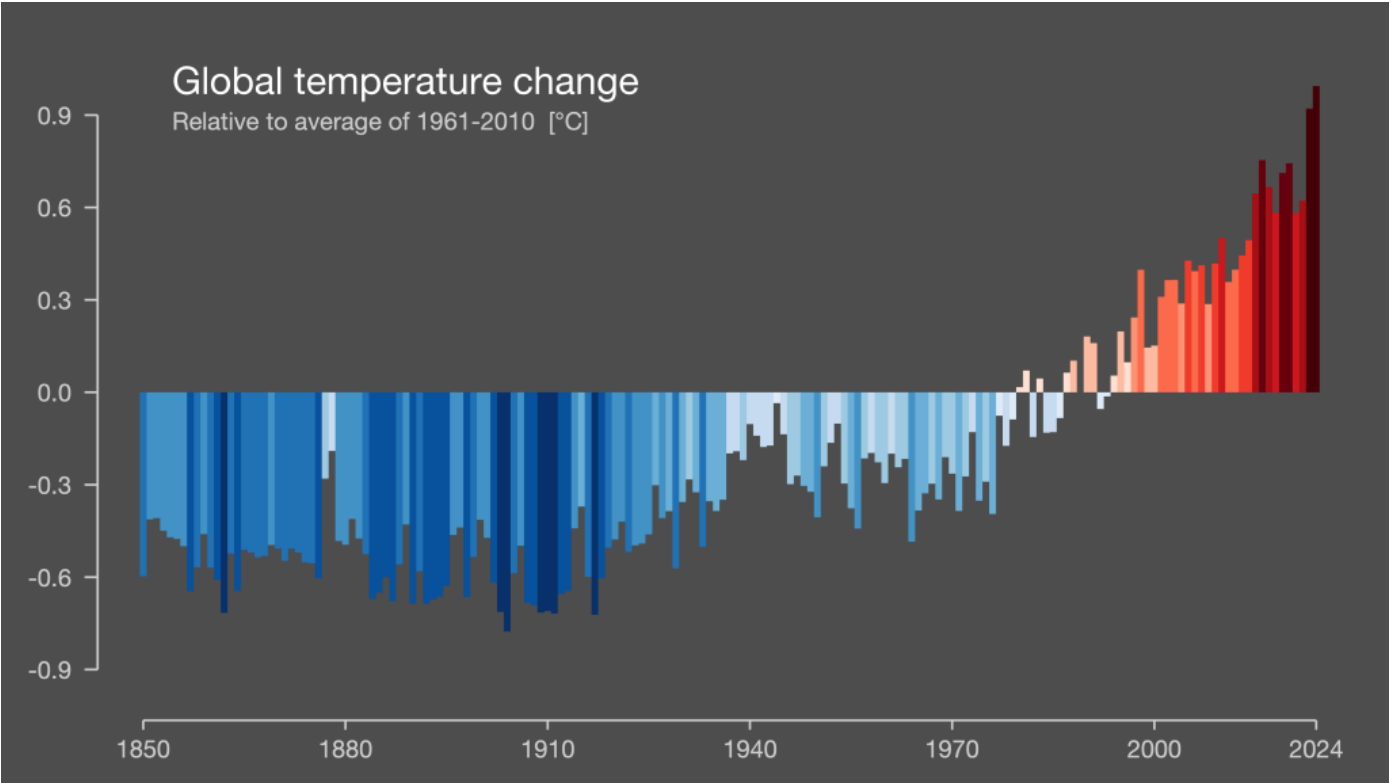
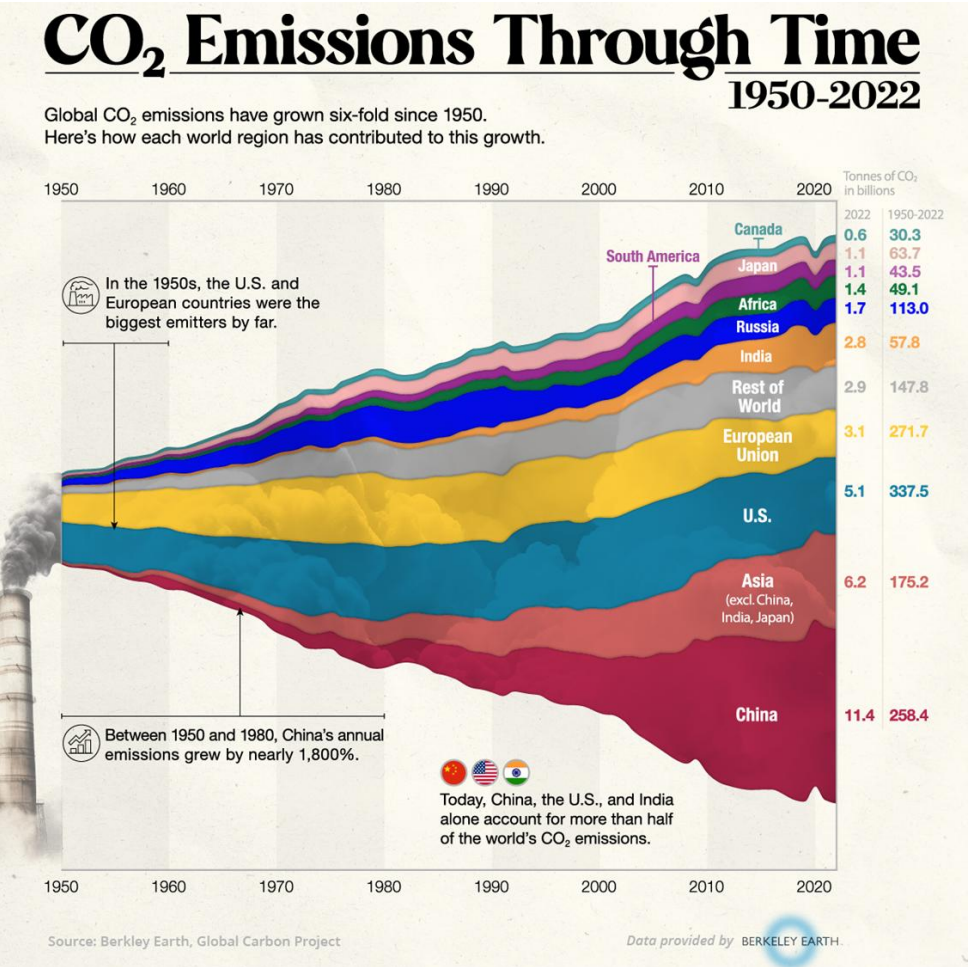


Why aren't we reusing more?

Gareth Atkinson and Anna Beckett

Why Reuse?



Why Reuse?



Who are we?



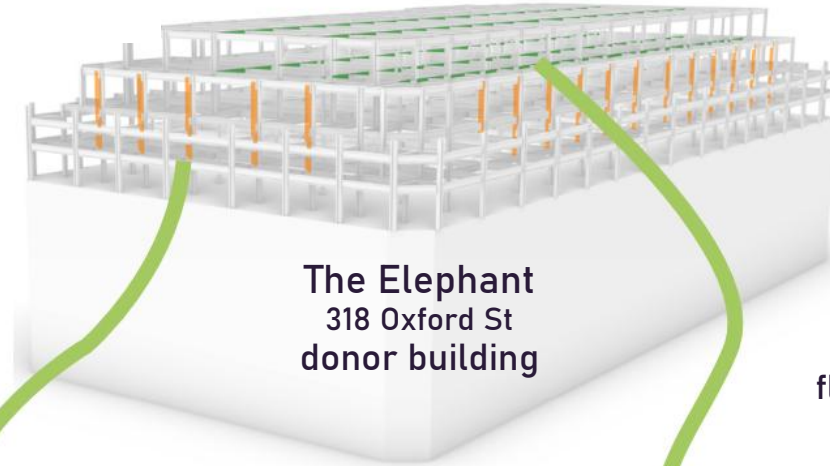
Collaboration

AJ Retrofit Live The Elephant to Tower Bridge Court



perimeter columns reused
on site

2.5 tonnes
(equiv. 6 T CO₂e)

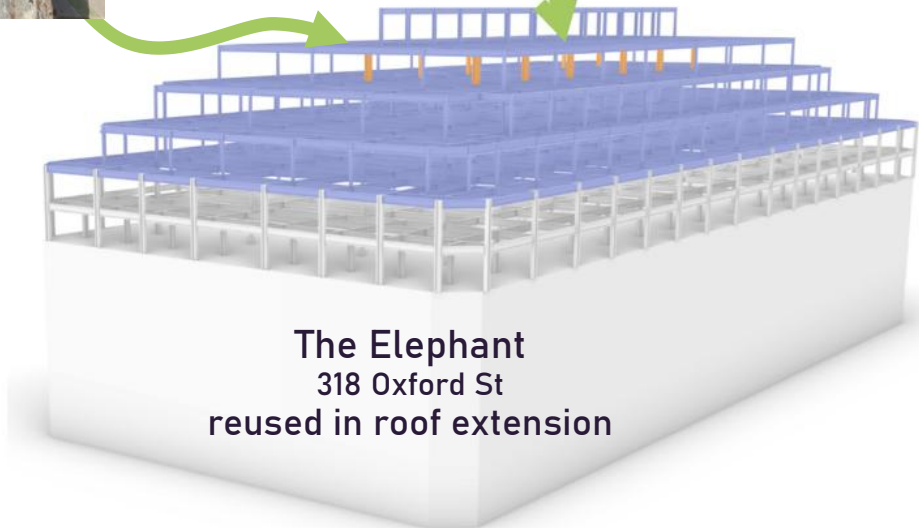


The Elephant
318 Oxford St
donor building



floor beams reused
on separate site

40 tonnes
(equiv. 100 T CO₂e)



The Elephant
318 Oxford St
reused in roof extension



TBC.London
recipient
building

How it started ... tERC Founding Companies



**“A collective of minds
focused on positive action
and empowerment”**

How it started ... tERC Founding Companies



BURO HAPPOLD

CIVIC
ENGINEERS

ElliottWood

HEYNE
TILLET
STEEL

WEBB
YATES

whitby wood

How its going ... tERC Corporate Member Companies



AECOM

ARUP



BDP.

BLYTH&BLYTH

BURO HAPPOLD



CIVIC
ENGINEERS

conisbee
Consulting Structural and Civil Engineers

CUNDALL

**Davies
Maguire**

**Design
ID**

DESIMONE

**Eckersley
O'Callaghan**

ElliottWood

engineersHRW

ENGENUITI

EVOLVE

Think | Design | Engineer


expedition



format

geni
ENGINEERING

**HEYNE
TILLET
STEEL**

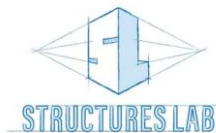
 **integral**
engineering design

 **Interspan**

mnp
mason navarro pledge

**PRICE &
MYERS**

RAMBOLL



**Thornton
Tomasetti**

Tullys

**WEBB
YATES**

whitby wood

WSP

The Engineers Reuse Collective is a not-for-profit group of practising engineers championing, accelerating and delivering reuse in the built environment to support the transition of the UK's built environment to Net Zero Carbon.

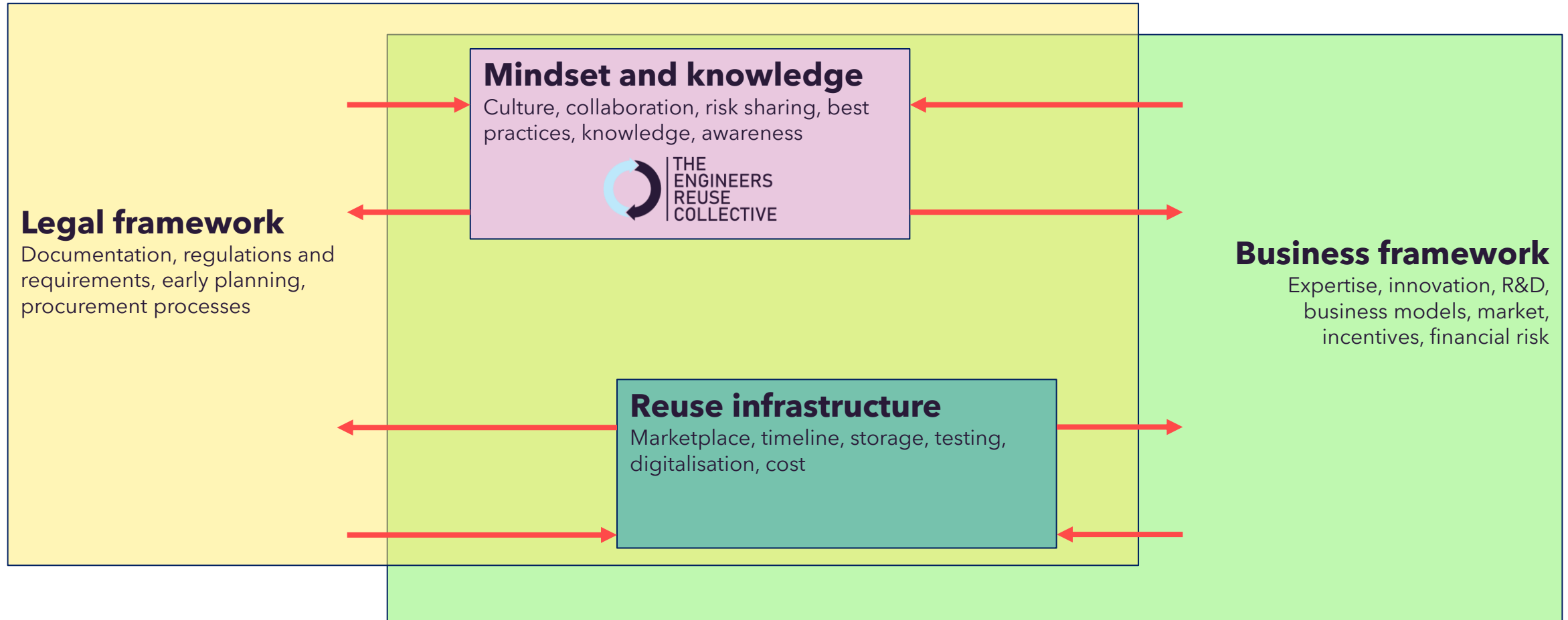
Our mission is to dramatically increase reuse within the built environment, with minimal reprocessing, to support the transition to circular economy principles and to urgently reduce the carbon intensity of the built environment.

-
- | | | |
|----|-----------|--|
| 1. | Implement | We promote and implement reuse in the built environment through information sharing and positive engagement with stakeholders. |
|----|-----------|--|
-
- | | | |
|----|-------------|--|
| 2. | Demonstrate | We actively demonstrate and share knowledge of effective solutions, overcoming barriers, success stories and lessons learnt. |
|----|-------------|--|
-
- | | | |
|----|----------|---|
| 3. | Champion | We challenge, encourage, and champion our clients and those we work with to maximise reuse on our projects. |
|----|----------|---|
-
- | | | |
|----|----------|---|
| 4. | Advocate | We provide a proactive, influencing, and collective voice for engineers to promote increased reuse. |
|----|----------|---|
-

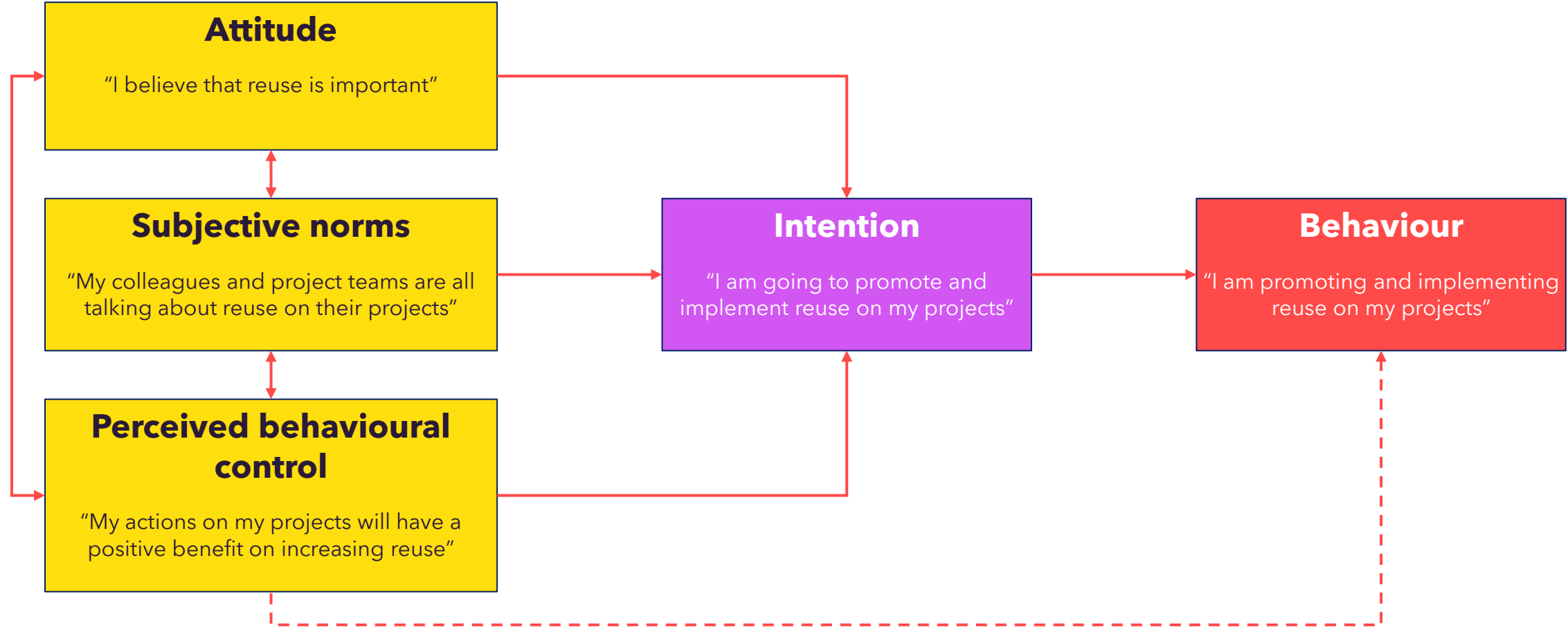
Why don't we reuse more?



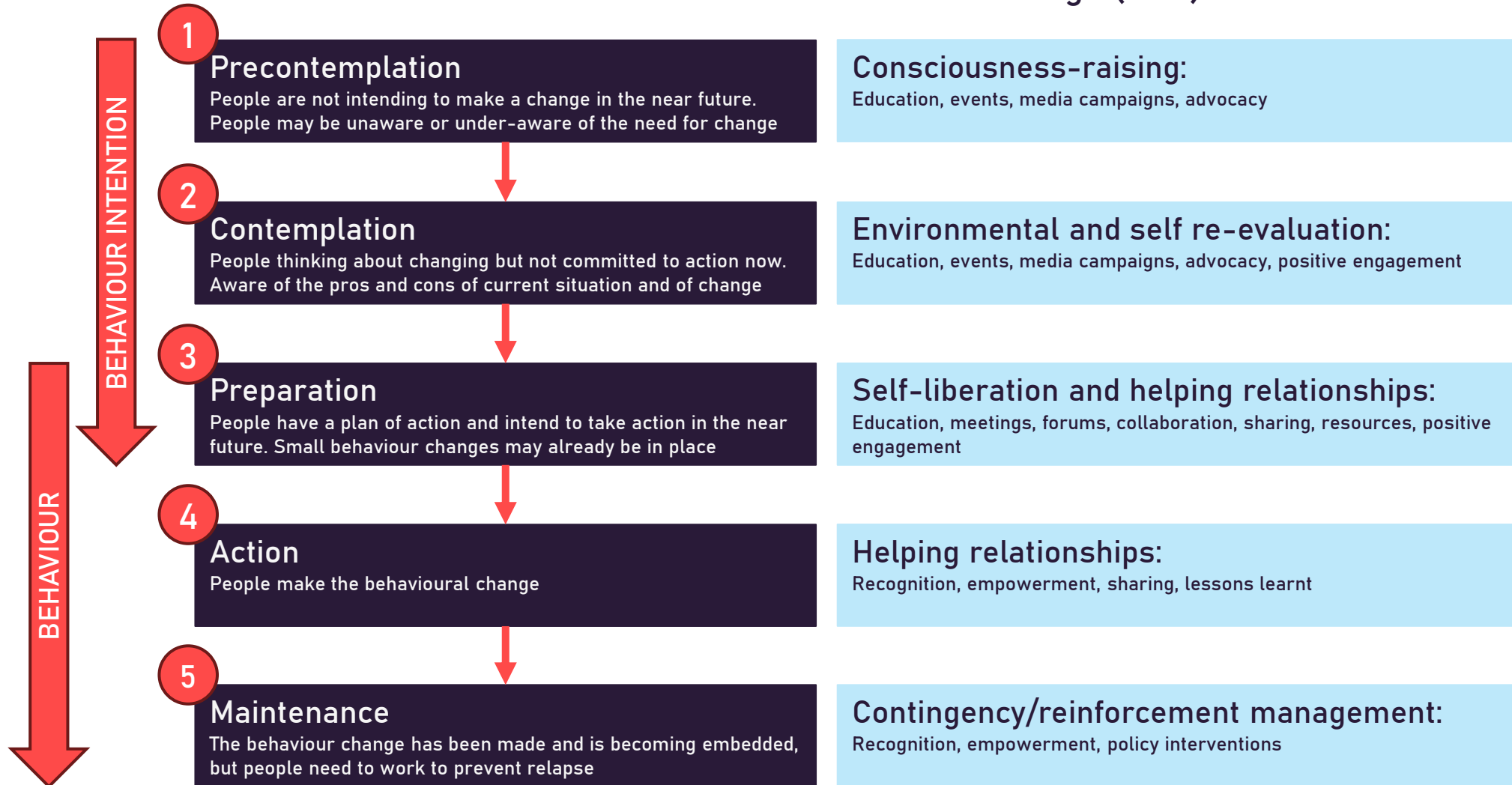
Barriers and success factors to reuse

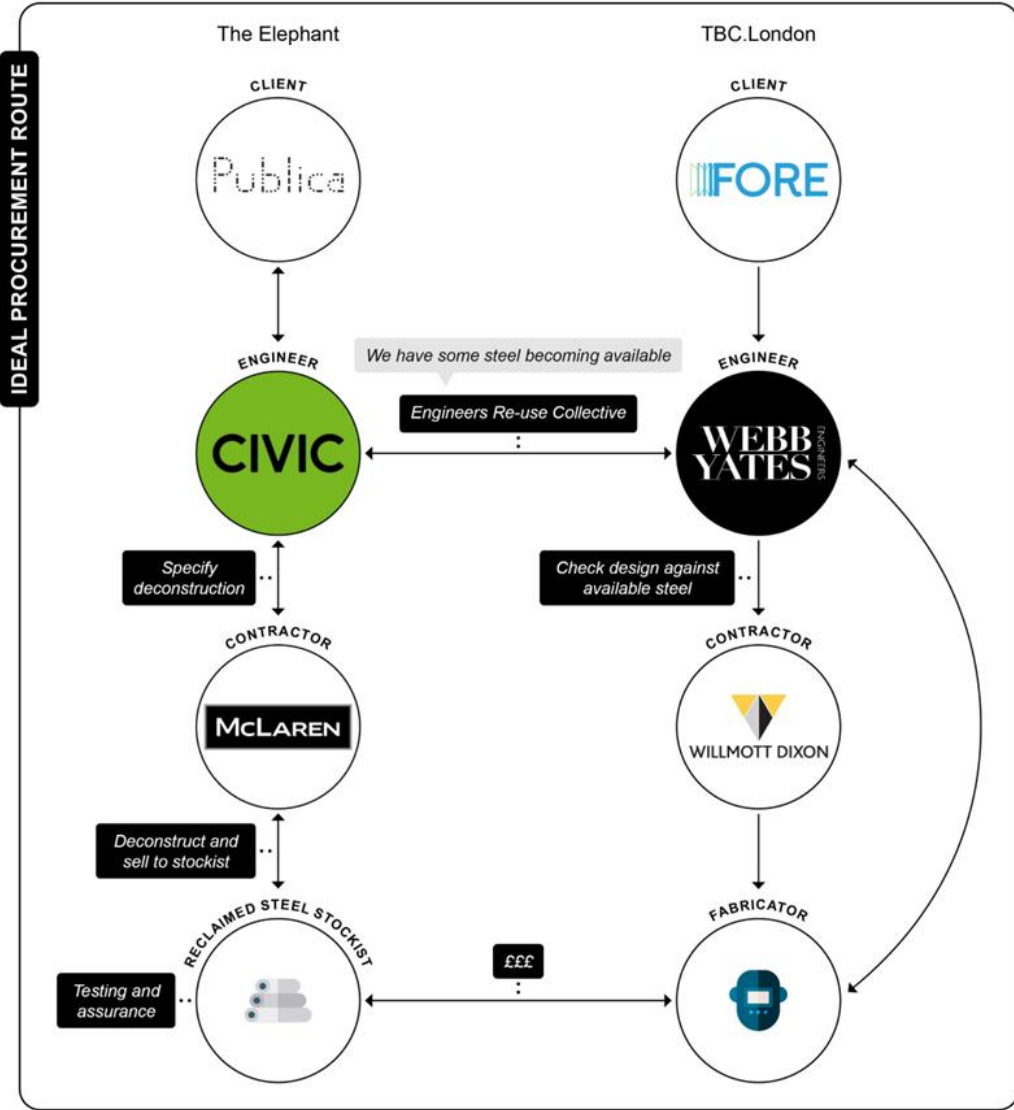
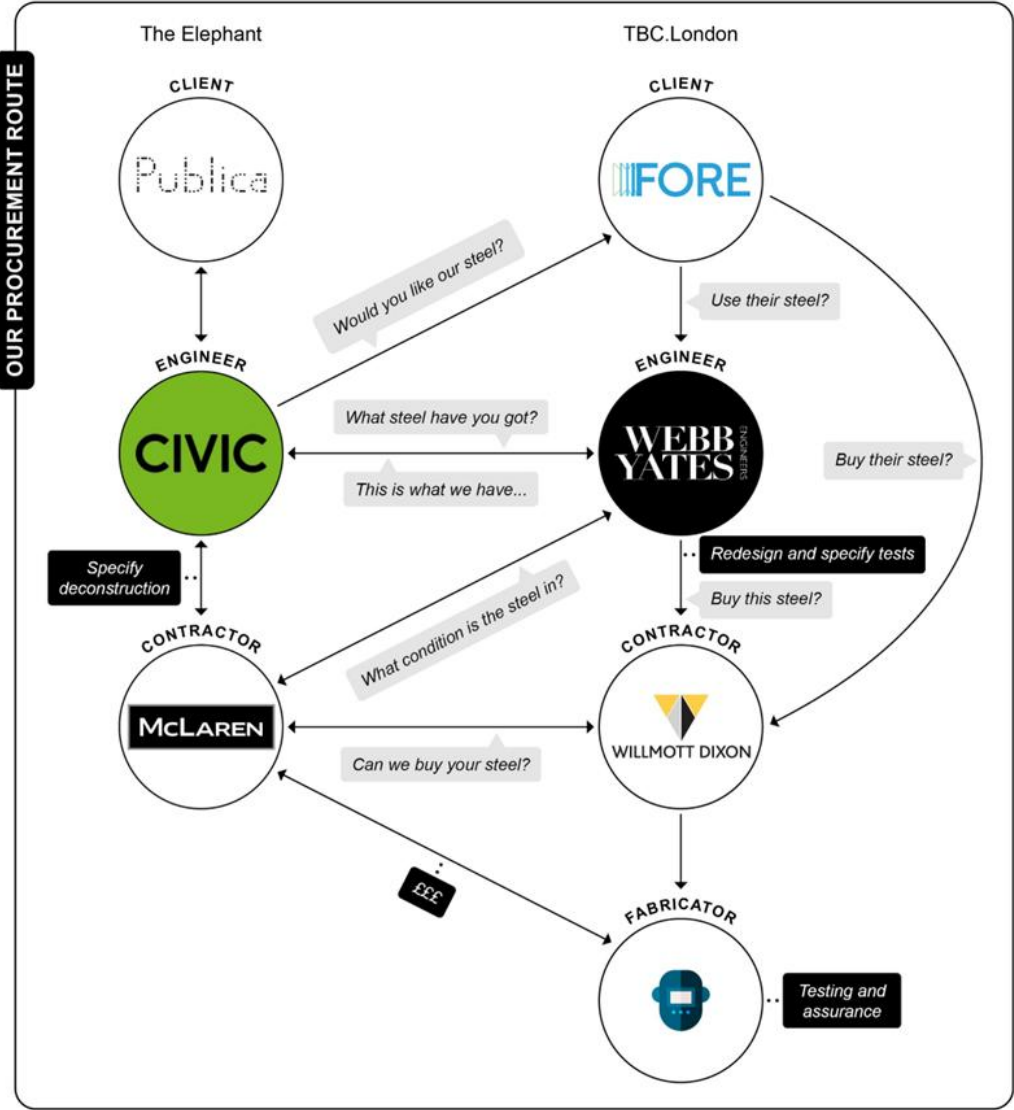


The theory of planned behaviour (TPB)



The transtheoretical model of behavioural change (TTM)





AJ Retrofit Live

There's currently a healthy supply of tubular steel sections available in the UK (you might consider using tubes for your columns?) as well as a reasonable number of open sections.

Why it matters: UK structural steel consumption is around 850,000 tonnes per annum (source: BCSA). If reclaimed steel made up just 10-15% of this, the impact would be significant.

If you know of additional stockists, let us know so we can grow the list.

John Lawrie Tubulars

Approx. 20,000-30,000 t of repurposed tubular steel sections (testing and certification can be provided).

Cleveland Steel and Tubes

38,000 t of certified tube.

47,000 t of uncertified tube (testing / certification can be provided).

3,500 t of reclaimed open sections.

Ainscough Metals

Approx. 5,000 t of secondhand open sections.

Whole secondhand portal frame structures [for sale](#).

Severfield

Building a stock of reclaimed sections (primarily for use on their projects, but also potentially available to others).



Used Steel Buildings for sale

100 ft x 50 ft x 13 ft - (30.5m x 15.2m x 4.1m)

A1 Steel Buildings are proud to offer this 100 ft x 50 ft x 13 ft - (30.5m x 15.2m x 4.1m) used steel framed building for sale. Please contact a member of our team for further information.

[read more...](#)

114 ft x 65 ft x 15 ft - (34.8m x 20m x 4.6m)

A1 Steel Buildings are proud to offer this 114 ft x 65 ft x 15 ft - (34.8m x 20m x 4.6m) used steel building for sale. The used building has already been dismantled and is available for immediate delivery/collection. The building consists of the... [read more...](#)

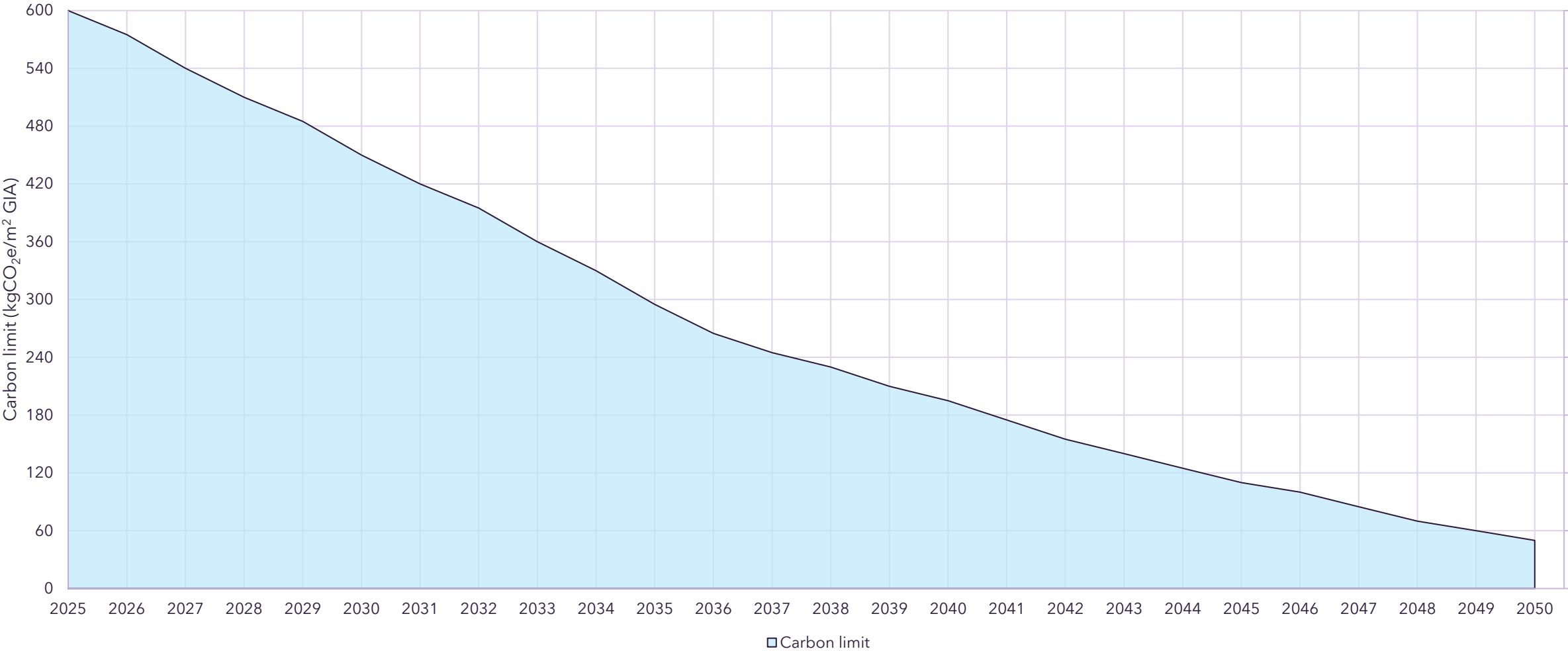


Used Steel Buildings for sale

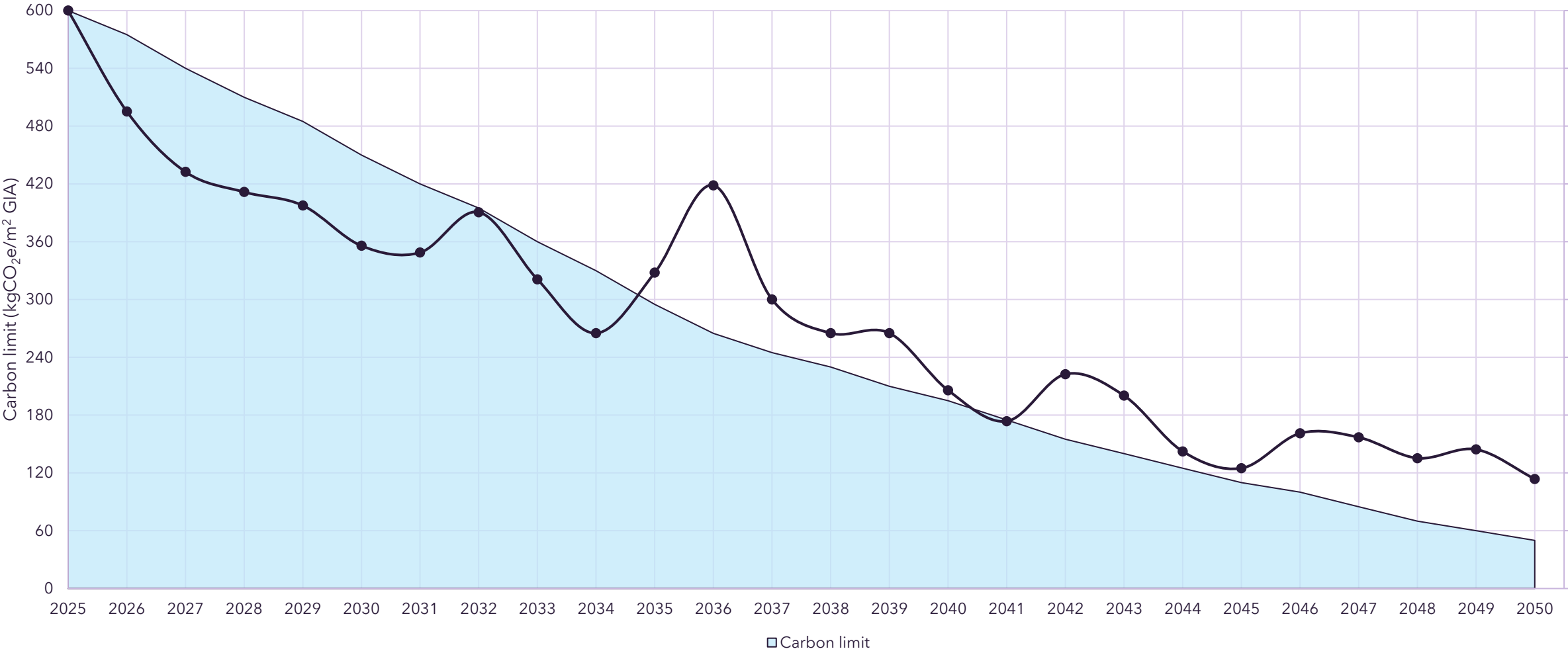
100 ft x 50 ft x 13 ft - (30.5m x 15.2m x 4.1m)
114 ft x 65 ft x 15 ft - (34.8m x 20m x 4.6m)
120 ft x 70 ft x 20 ft - (36.6m x 21.3m x 6.1m)
140 ft x 65 ft x 16 ft - (42m x 20m x 5m)
140 ft x 70 ft x 25 ft - (42m x 21.3m x 7.5m)
165 ft x 95 ft x 16 ft - (50.3m x 28.9m x 5m)
225 ft x 95 ft x 16 ft - (68.6m x 28.9m x 5m)
340 ft x 95 ft x 20 ft - (103.7m x 29m x 6.1m)
38 ft x 47 ft x 15 ft - (11.6m x 14.3m x 4.5m)
400 ft x 91 ft x 20 ft - (122m x 27.7m x 6.1m)

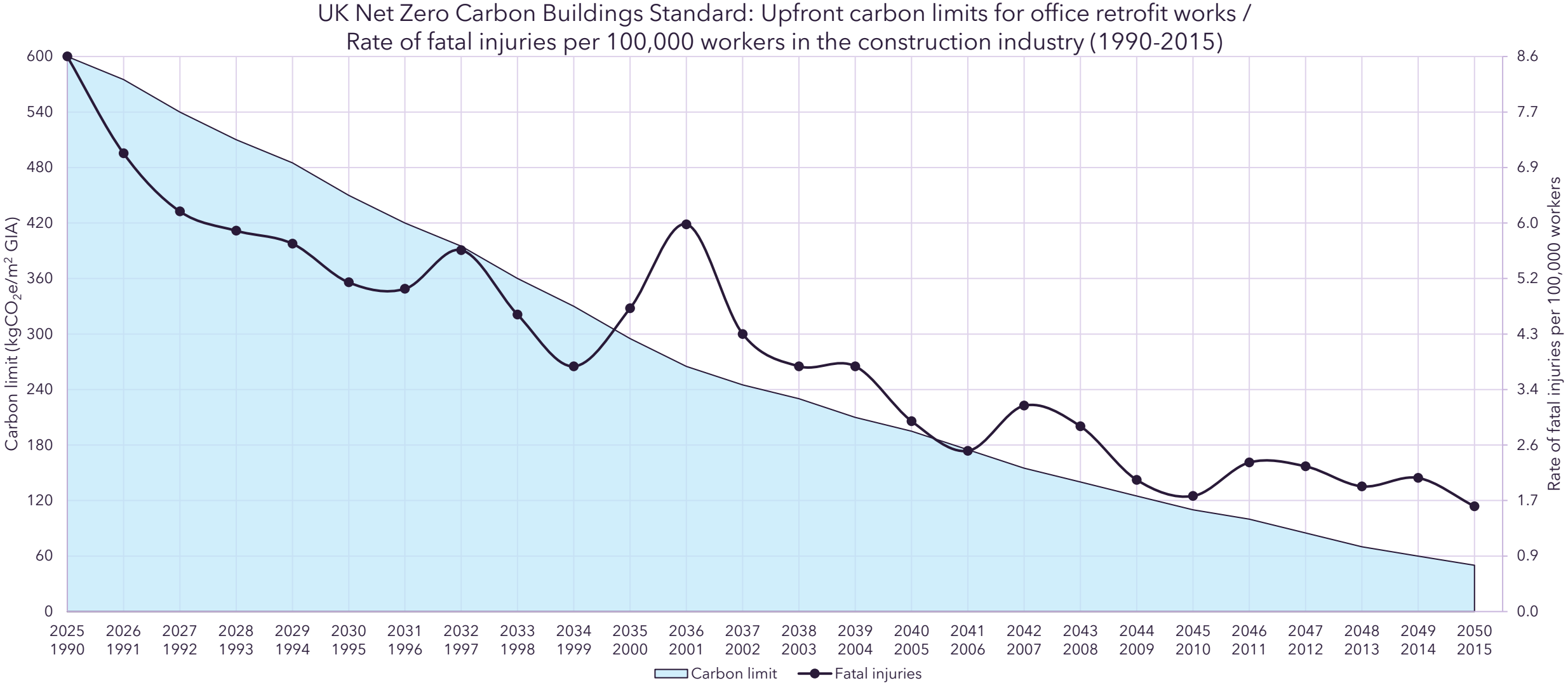
Can we do it?

UK Net Zero Carbon Buildings Standard: Upfront carbon limits for office retrofit works



UK Net Zero Carbon Buildings Standard: Upfront carbon limits for office retrofit works





Source: Health and Safety Executive (2024), *Work-related injuries reported under RIDDOR from 1974*.
<https://www.hse.gov.uk/Statistics/history/index.htm> [accessed November 2024]

Success Stories

AJ Retrofit Live
63 New Bond Street to Elliott Wood 30th Anniversary Party



AJ Retrofit Live Holbein Gardens

Two Storey vertical extension with 9t of steel from Grosvenor projects and 16t of reclaimed steel via stockists (Cleveland)

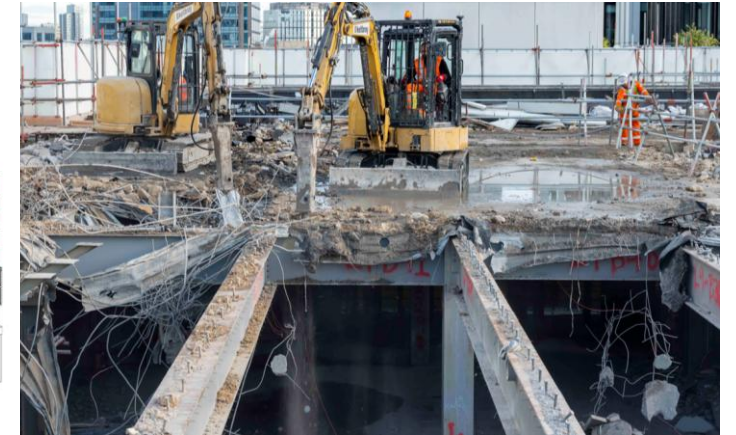
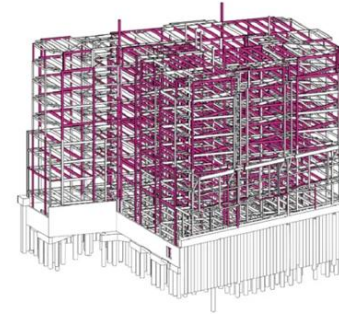


AJ Retrofit Live 30 Duke Street

Currently Largest steel re-use project in UK, with **Portland stone, granite, marble, timber handrails** being salvaged



Donor: City Place House
● ~1,500t of steel salvaged

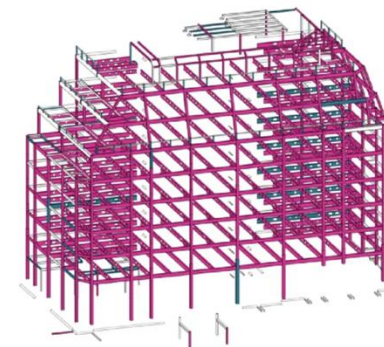


Recipient 1: 180 Piccadilly
● ~74% of the structure
uses reclaimed steel.

7.4% is from wider EMR stock.

66.6% is from the donor building and
7.4% is from wider EMR stock.

By utilising Cleveland Steel Stock there
is potential to increase this further.



AJ Retrofit Live Timber reuse



WORK TOGETHER

CHANGE MINDSETS

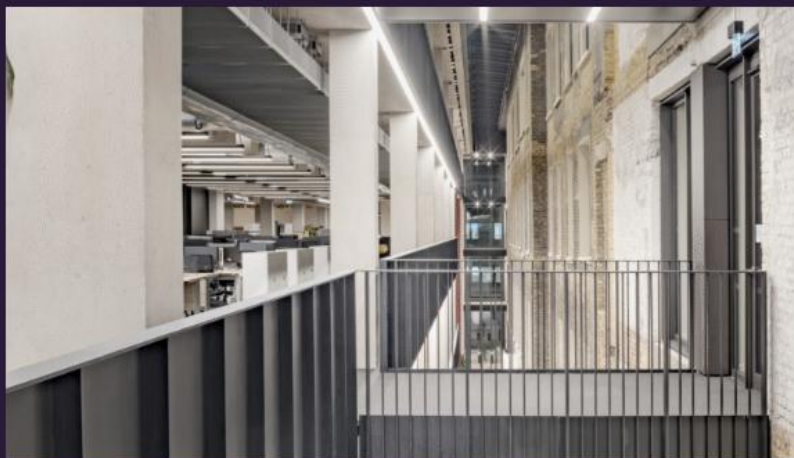
WASTE LESS

REUSE MORE



Event:
No Silly Questions – Deconstruction
30 September 2025: Online

Join us for our next No Silly Questions Session on the topic of deconstruction. Note: this event is limited to tERC members only.



Event:
Talking Reuse – Adaptive Reuse
8 October 2025: Bristol

Join us for a meeting (in-person and online) where Price&Myers, Integral Engineering Design and Format Engineers will present examples and their perspectives on reuse and repurposing.



Event:
Talking Reuse – Concrete
10 September 2025: London

Join us for an evening meeting (in-person and online) where Arup and Heyne Tillett Steel will present new and innovative approaches to reusing concrete as structural components.

