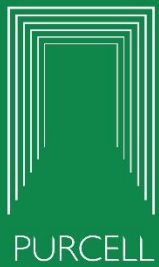


# Historic Building Challenge

## Carbon Reduction & Climate Resilience



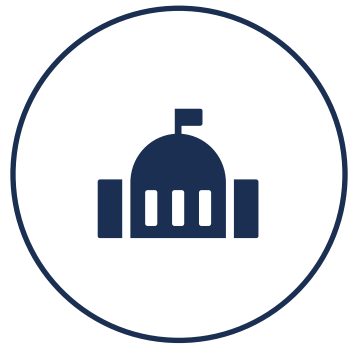
# City of London Corporation Climate Action Strategy

Aled Thomas  
Climate Action: City Workstream Manager  
City of London Corporation



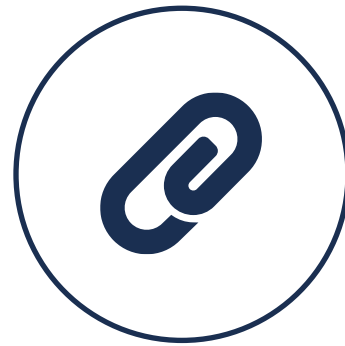
# The City Corporation has committed to achieving...

Four objectives



**Net zero by 2027**

in the City Corporation's  
operations



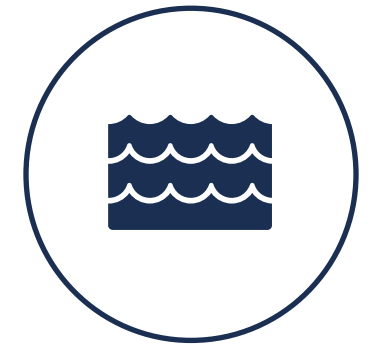
**Net zero by 2040**

across the City Corporation's  
full value chain



**Net zero by 2040**

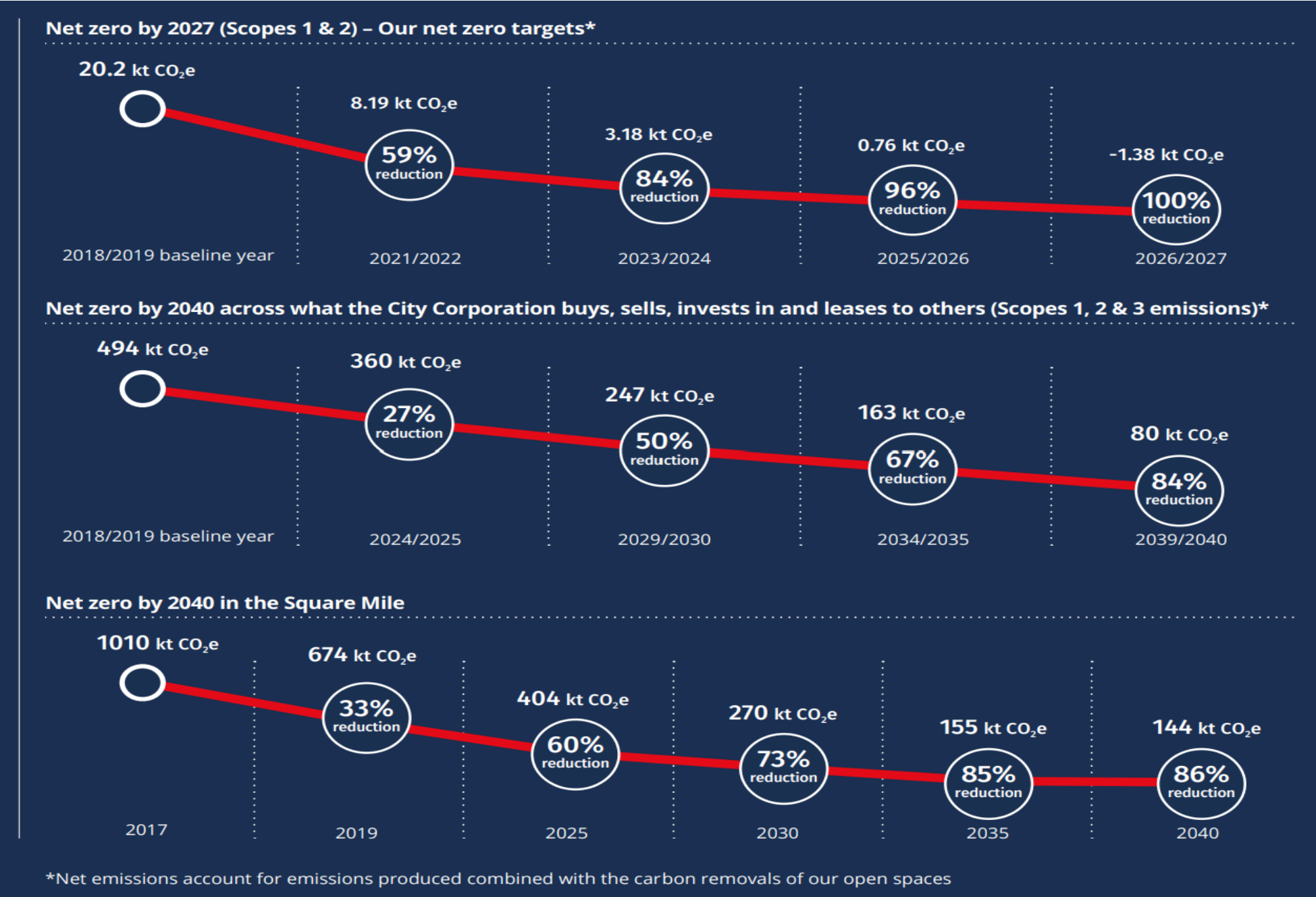
in the Square Mile



**Climate Resilience**

Climate resilience in our  
buildings, public spaces and  
infrastructure

# GHG Emission reduction trajectories



# Climate Action Strategy – workstreams

- Buildings – Corporate Properties and Housing
- Buildings – Investment Properties
- Buildings – Capital Projects & Resilience
- Purchased Goods and Services
- Square Mile
- Cool Streets and Greening
- Mainstreaming Resilience
- Heart of the City and SME Engagement
- Financial Investments
- Carbon Removal and Land Management
- Transport

# Transparency and Monitoring

## Climate Action Strategy Dashboard



HOME

EXECUTIVE SUMMARY

OWN OPERATIONS

VALUE CHAIN

SQUARE MILE

RESILIENCE

STAKEHOLDER ENGAGEMENT

GLOSSARY

# Climate Action Strategy

Data last refreshed  
27 June 2022

The Climate Action Strategy sets out how the City Corporation will achieve net zero in its carbon emissions, build resilience to extreme weather as result of climate change and champion sustainable growth.

We will achieve:

- Net zero by 2027 in how the City Corporation operates (Scope 1 and 2 emissions).
- Net zero by 2040 across what the Corporation buys, sells, invests in, and leases to others (our value chain, or Scope 3 emissions).

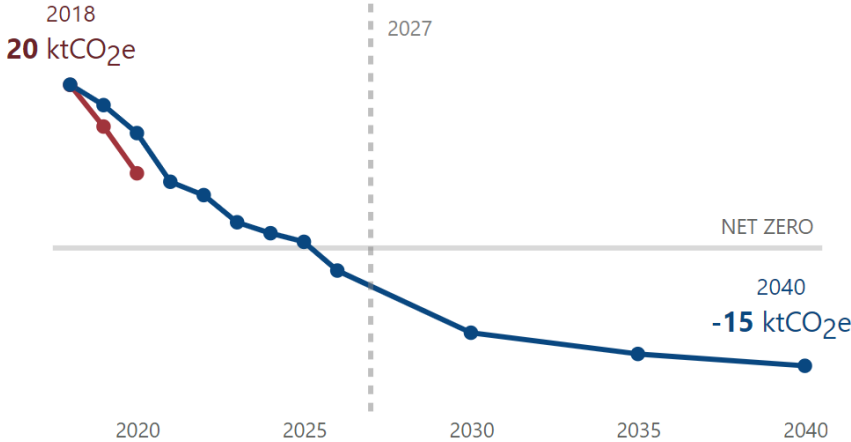
Across the Square Mile, we will support the achievement of:

- Net zero by 2040.
- Resilience to extreme weather in buildings, public spaces and infrastructure.

The charts to the right provide the starting point (or baseline) and then show how we plan to reduce our emissions. Our plan is to reduce emissions in line with the 2015 Paris Agreement, an international agreement to limit global temperature rise to 1.5°C from pre-industrial levels. For our 2040 goals more planning and interventions are needed beyond what is shown here and we are working towards those now.

OUR OWN OPERATIONS   OUR VALUE CHAIN   THE SQUARE MILE

City Corporation's Own Operations (Scope 1&2)  
**ACTUAL** vs. **TARGET** Net Emissions (ktCO<sub>2</sub>e)



How do we define net zero for a corporation? Using the highest standards set out by the Science Based Targets Initiative, this means:

- Taking action to **reduce emissions** at levels consistent with Paris Agreement (2015). That means not doing anything that contributes to more than 1.5°C of global warming from pre-industrial levels
- Balancing out any remaining emissions through the **removal of carbon from the atmosphere**. This is measured in the equivalent volume of CO<sub>2</sub>

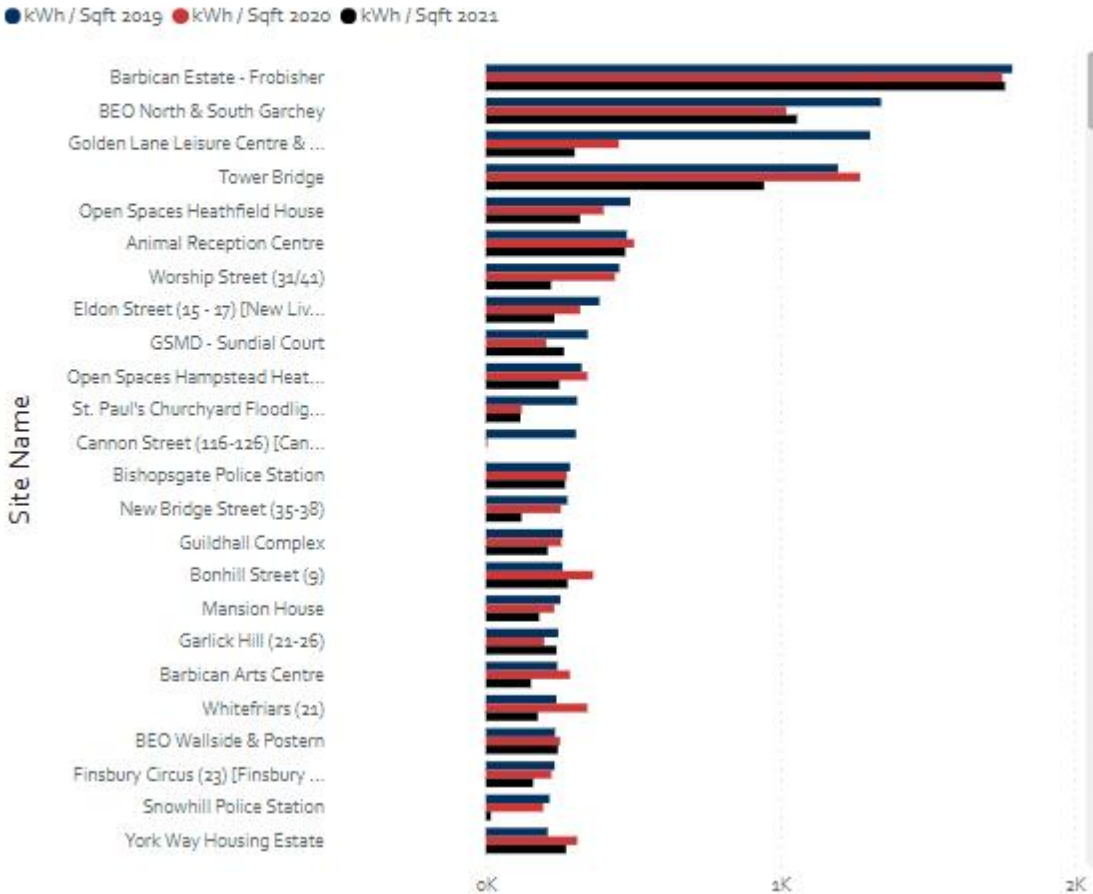
Source: SBTi Corporate Net-Zero Standard (October 2021)

# The power of transparency

## Climate Action Strategy Dashboard



Sites by energy intensity (KWH / SQFT)



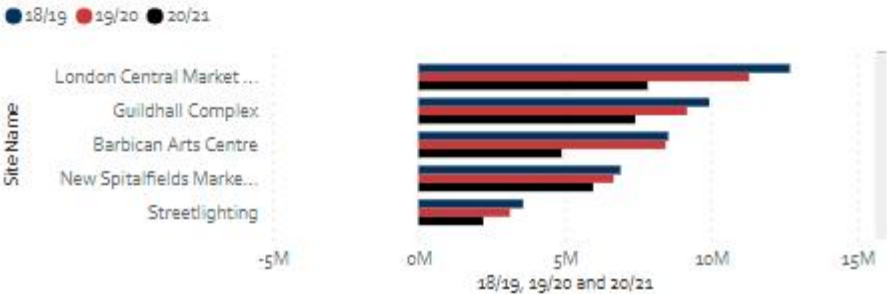
Sites by energy consumption



Energy source

Electric  Gas

Energy consumption over time (Elec)



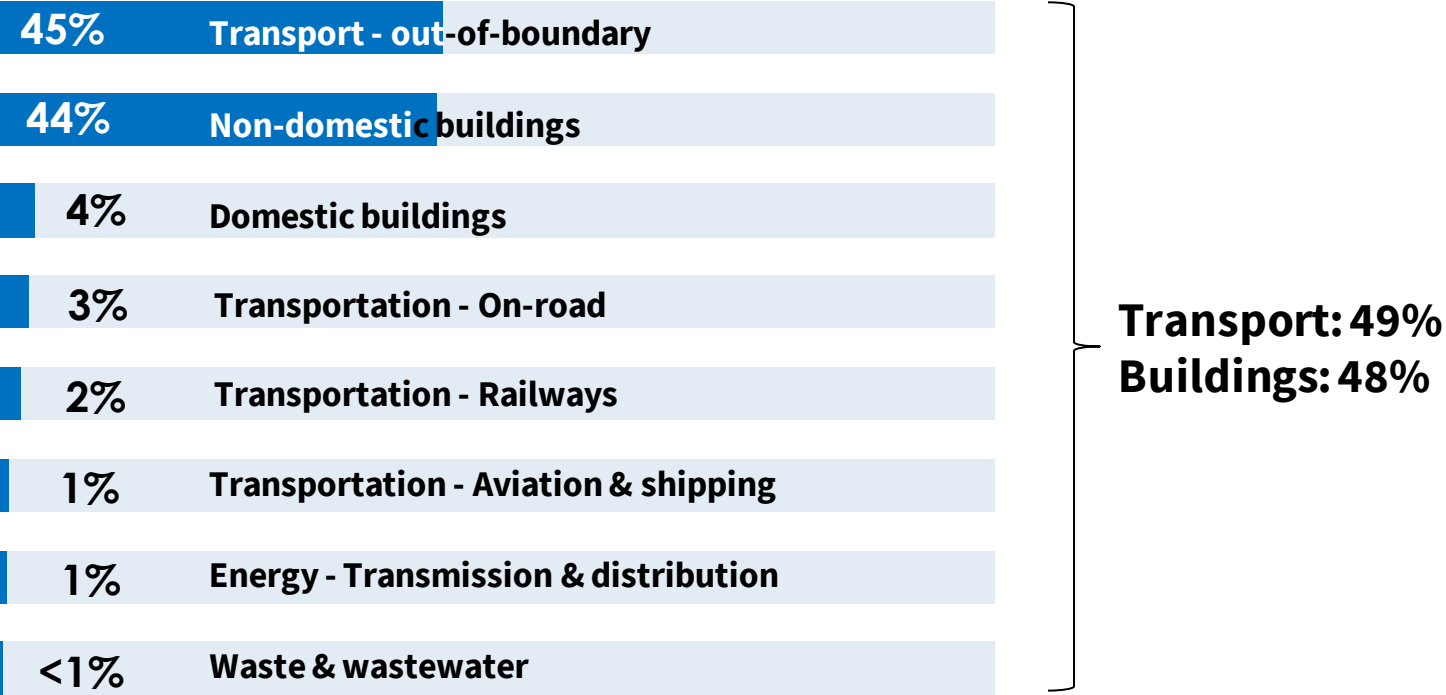
# Understanding the Square Mile's emissions

## The baseline



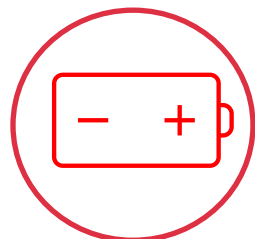
### Square Mile ('BASIC+') boundary (1,528 ktCO<sub>2</sub>e)

These are the City's scope 1, 2 (within City boundary) and scope 3 (outside City boundary emissions).



# CAS - Square Mile Workstreams

## 6 Key Actions:



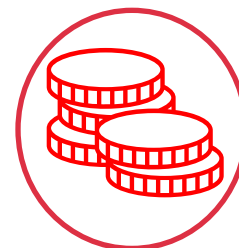
Develop and implement a Square Mile Local Area Energy Plan



Tighten standards for new buildings through Supplementary Planning Guidance



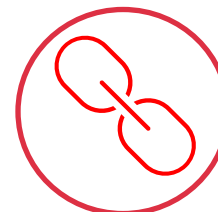
Historic Building Energy Retrofit Challenge



Scope and launch a Climate Action Fund



Create exemplar guidance on Square Mile refurbishment



Develop and implement a Square Mile organisational value chain strategy

# Climate Action Progress Report 2022

## Progress:

- 31% carbon emission reduction in own operations
- 20% reduction in carbon intensity of investments
- Power Purchase Agreement (PPA) providing 100% renewable energy for 51% of Corporation's energy needs

## Challenges:

- Must accelerate our work on decarbonising non-domestic buildings and transport
- These account for 90% of Square Mile emissions
- So far, neither is decarbonising at the rates needed to meet the upcoming interim goals



# Why a Historic Building Challenge?

- Square Mile - a unique historic environment of exceptional richness and significance
- Designated assets - over 600 listed buildings, 27 conservation areas, 48 scheduled ancient monuments and four historic parks and gardens.
- Fit for the future - transitioning away from a reliance on fossil fuels and being resilient to a changing climate
- Collective Challenge – adapting this historic environment will need to draw on the actions and expertise of a wide range of stakeholders.

# Historic Buildings Challenge Carbon Reduction and Climate Resilience

Laura Baron  
Head of Sustainability  
Purcell





**BRITAIN'S HOTTEST DAY IS FORECAST**  
IT'S SET TO TOP 40C FOR FIRST TIME  
UNPRECEDENTED RED HEALTH ALERT

**Confused...**

**VR HEADSET**

**LIFE IN COMPANY**  
INSURANCE POLICYHOLDERS MUST READ

**Mirror** The Heart of Britain

**JLO & BEN**  
The long and rocky road to wedding day

**BLOWTORCH BRITAIN**

**43**

**Record baker**

at day today to come

**Schools shut...rains buckle...runways melt**

**THE Sun** PEOPLE'S PAPER

**HARRY BID TO SAVE WORLD**

**HEATWAVE PEAKS**

**BRITAIN IS MELTING**

**INCIDENT**

**Ministers told to rewrite climate emergency plan**

Judge condemns net zero policy as UK braces for record heat

ANDREW WOODCOCK POLITICAL EDITOR

Ministers failed to outline how their net zero strategy will achieve emissions targets, the court ruled yesterday, on the day Britain sweltered under its first ever extreme heat alert as temperatures exceeded 31C. Government proposals for how to claim it was on track to fulfil its promises on global warming, the high court said, even though "it is plain from the evidence before the court that the information exists...". Mr Justice Holman concluded, the embarrasment of a "major hole at the core of government" over the resilience of critical national infrastructure to climate change.

**Evening Standard** 70p

**London rental crisis spirals out of control**

**Summer's hottest trend? Get ready for Barbiecore**

**LONDON SIZZLES**

HEATWAVE BUILDS AS UK TEMPERATURE RECORD SET TO FALL

COMMUTERS' MISERY ON SWELTERING JOURNEY TO WORK

SOME SCHOOLS CLOSE AND NHS BRACES FOR INFUX OF PATIENTS

**Rishi and Liz in new tax clash as candidates make pitch to capital**

**Dark truths about motherhood**  
The new memoir for mums

**The Daily Telegraph**

The heatwave has driven us all mad

**The Daily Telegraph**

Record highs, travel chaos, schools close... and it's going to get hotter

Prince Charles 'alarmed' but has confirmed any climate fear

**Daily Mail** 20p

**Sunny day snowflake Britain**

one of world's warmest spots **41°**

**HOTTER THAN THE SAHARA**

Beaches full as offices & schools shut

AND INDIA...AND PAKISTAN...AND ALGERIA...AND ETHIOPIA...

**Day of reckoning for Truss and Mordaunt**

Truss gains, although bids to fudge budget forward

Mordaunt makes biggest advance on Tory fight

Flood bars vulnerable rise by 200 a day

**Earth sends a warning**

90% chance that today will be Britain's hottest on record

Temperatures set to soar to record highs today, even topping 40C

Flights suspended after runway melt at Luton and PAZ fire trucked to base

Police in London urged to wear heat-reflective gear

Princess Charlotte's presence at politics to say that 'it's not just a hot day'

There's never been more impact heat

**THE TIMES**

When Meghan met Harry's friends

**BLOWTORCH BRITAIN**

'Stay in' warning amid deaths fears and travel chaos

**METRO** FREE

**GET READY FOR... HOTTEST DAY EVER**

AIRPORTS CLOSED, ROADS MELTING BUT MOST YET TO COME

TEMPERATURES SET TO SOAR TO RECORD HIGHS TODAY, EVEN TOPPING 40C

**40C WIN**

Nation urged: take afternoon naps to beat intense heat

UK world's hottest place after Sahara and Middle East

Christine ring girl

**HALF PRICE**

Get half price for the rest of the year

Six months half price on selected SIM only plans

**vodafone**

**DAILY STAR**

**And you thought YOU were having a tough day**

**RECORD HEAT DUE TODAY**

**AIRPORT FORCED TO SHUT**

**Just Jane**

Our agony aunt solves your problems

**HEADERS BAN FOR UNDER 12s**

**GOLF'S MULLET HAIR-O**

**DAILY THOUGHT FOR THE DAY STAR**

**IT'S SIESTA**

**Bozo's £1million book deal**

**TEXT ABUSE**

**Christine ring girl**

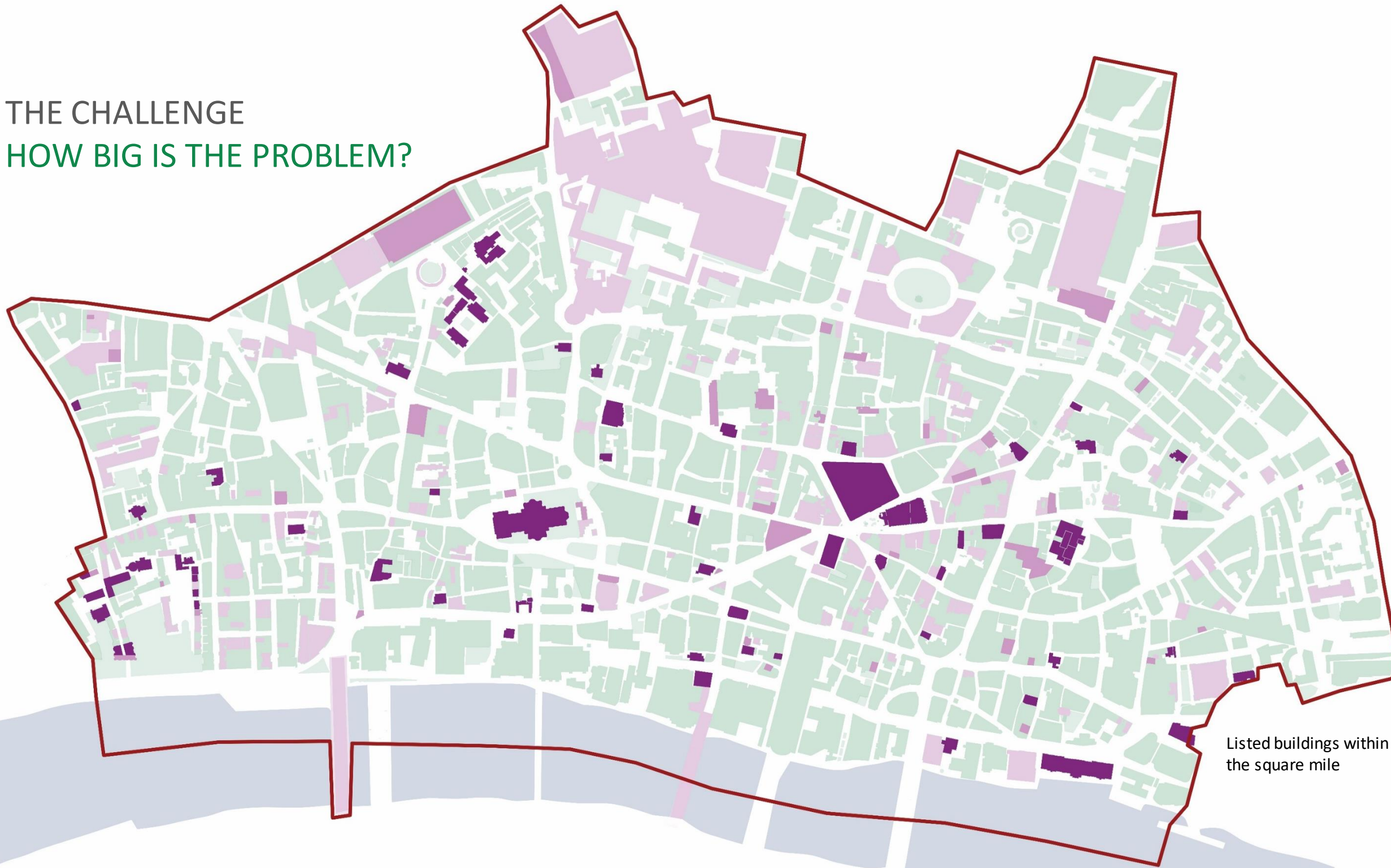
**Nosecco please**

**Proud Heather**





THE CHALLENGE  
HOW BIG IS THE PROBLEM?



Listed buildings within  
the square mile

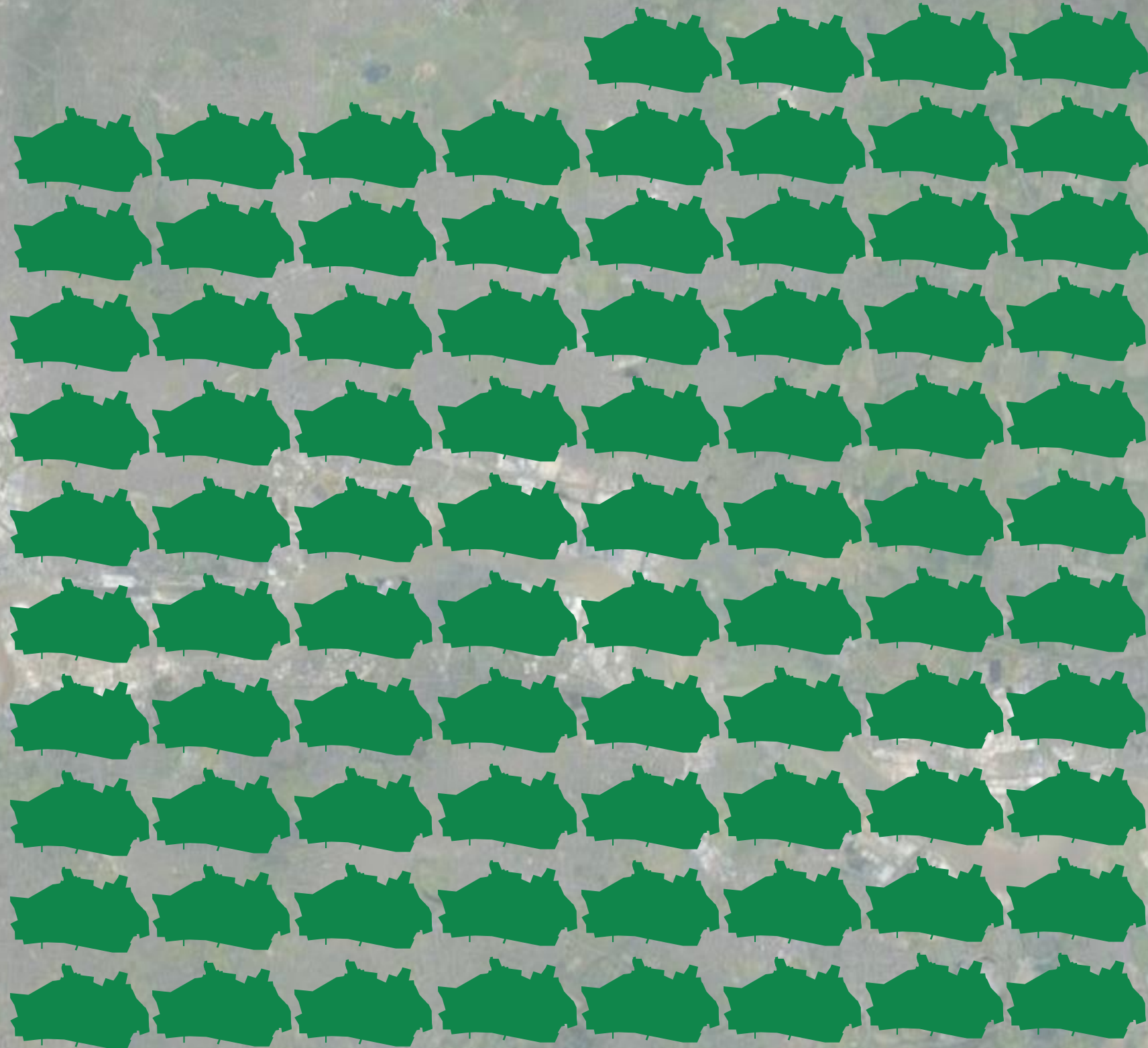
THE CHALLENGE  
HOW BIG IS THE PROBLEM?



# THE CHALLENGE

## HOW BIG IS THE PROBLEM?

Native woodland required to absorb annual carbon emissions of the Square Mile's listed buildings is approximately 84.6 times the size of the Square Mile. (approximate value based on available data)



## THE CHALLENGE CHALLENGE OR OPORTUNITY?

**Conservation**  
*noun*

The protection of plants and animals, natural areas, and interesting and important structures and buildings, especially from the damaging effects of human activity.

# THE CHALLENGE

## CHALLENGE OR OPORTUNITY?



# THE CHALLENGE A COLLABORATIVE EFFORT



THE CHALLENGE

WHAT WE WANT TO KNOW

1. WHERE ARE WE?

2. WHAT ARE THE CHALLENGES?

3. WHAT DO WE NEED?

# THE CHALLENGE

## WHO WE ARE



1

Tatiana Guinness  
Historic Building Challenge Coordinator  
Purcell



3

Kate Sanders  
Partner  
Purcell



5

Harriet Pillman  
Senior Architect  
Purcell



7

Laura Baron  
Head of Sustainability  
Purcell



2

Alasdair Travers  
Partner and Head of Design  
Purcell



4

Jon Wright  
Heritage Consultant and C20 Specialist  
Purcell



6

Miranda McCabe  
Associate  
Purcell



8

Aled Thomas  
Climate Action City Workstream Manager  
City of London Corporation



## THE CHALLENGE

### WHAT NEXT?

- Understanding barriers, challenges and risks
- Identifying and analysing best practice examples
- Knowledge sharing and recognition
- A toolkit for carbon reduction and climate resilience
- An on-line platform to share information, case studies and best practice – developing a community of practice
- Feed in to City policy development e.g. Local Plan

THE CHALLENGE  
WHAT NEXT?



[historicbuildingscarbonreduction.commonplace.is](https://historicbuildingscarbonreduction.commonplace.is)

