



We The Curious

Decarbonising your science centre

Donna Speed, CEO

Roddy Skinner, Carbon Manager



Where are we?









THE
Green
Tourism
GOLD



Suzie McKenzie
 Visitor Experience
 Team
*(Including admissions,
 bookings, retail,
 membership)*



Tom Leonard
 Finance



Lisa Smith
 People



Chris Dunford
 Sustainable
 Futures Team
 Leader
*(Link to Leadership
 Team)*



Roddy Skinner
 Sustainable
 Futures
(Data collection)



Ella Norwich
 Sustainable
 Futures
*(project
 coordinator
 and key contact)*



Jen Forster
 Audience
*(PR & comms,
 marketing, design, Big
 Screen, evaluation,
 volunteers)*



Simon Cooper
 Board of
 Trustees



Robert Phillips
 Membership &
 Bookings
*(including Tessitura
 team)*



Beth Sheehan
 Internal comms, staff
 travel,
 administration,
 Sports & Social Club



Jen Field
 Estates Director



Craig Perry
 Estates Services



Deanna Sartin
 Venue Hire



Hester Welch
 Live Science
 Team



Julian Welsh
 Education
*(Including
 location bookings
 and lab tech)*



Mark Lambert
 Estates Facilities
*(Including cleaning
 team)*



Tim Robertson
 Estates
 Maintenance



Sam Ring
 Digital



Tom Rodgers
 Programming
*(Including Planetarium,
 all delivery spaces,
 creative producer, Open-
 Source Science)*



**Katie
 Leaming**
 Exhibitions



**Amanda
 Colbourne**
 People
*(diversity, inclusion,
 participation,
 communities)*



we the curious

Sustainable Futures

The 3 x 6 Campaign

	1 First steps	2 Challenging but achievable	3 Super ambitious
1 ENERGY	Change 'hot set' exhibit lighting	LED lampposts across site	More photovoltaic panels across site
2 WATER	Game-ify the office dishwasher experience	Reduce water loss from Millennium Square water features	Rainwater harvesting for toilets
3 PROCUREMENT	All teams to switch to DocuSign software instead of postage	All paper and wood products onsite are FSC accredited or made from 100% recycled content	Rewrite the Site Use and Access Guide to ensure all events onsite are delivered sustainably
4 WASTE	Change printer settings so print jobs can only be released at the printer	Waste collection contracts – including food (and retire composter)	No single-use plastic
5 TRAVEL	No UK flights. Criteria and off setting for all other We The Curious flights	More electric vehicle charging points in car park and switch off signage across site	Replace diesel vehicles with electric
6 NATURE	Form staff gardening club and recruit two new bee keepers	Solution for watering of plants across site	Living walls on the annex building



CAN ONE
QUESTION
CHANGE YOUR
WORLD?

SORRY



@ Bristol

Bringing science to life!



WE THE CURIOUS
PRESENT

**M A N
I F E
S T O**

FOR A CULTURE OF
CURIOSITY

RADICALLY
TRANSFORMING THE
SCIENCE CENTRE



**Cultivate
curiosity**

**Open up science
in our city**

**Enable diverse
participation**

**Strive for
sustainable
futures**

Build Resilience

SAVE



SHARE



NEWS / ENVIRONMENT


WE THE CURIOUS FIRST SCIENCE CENTRE IN WORLD TO DECLARE CLIMATE EMERGENCY

By **ZOË CROWTHER**, Wednesday Jun 5, 2019

We The Curious has become the first science centre in the world to declare a climate emergency, pledging to become carbon neutral by 2030 and hoping

**Silence is a statement
that is open to gross
misinterpretation.**

Craig Reucassel

 [quotelama.com](#)



B B C NEWS








bbc.co.uk

We The Curious Plan 2030

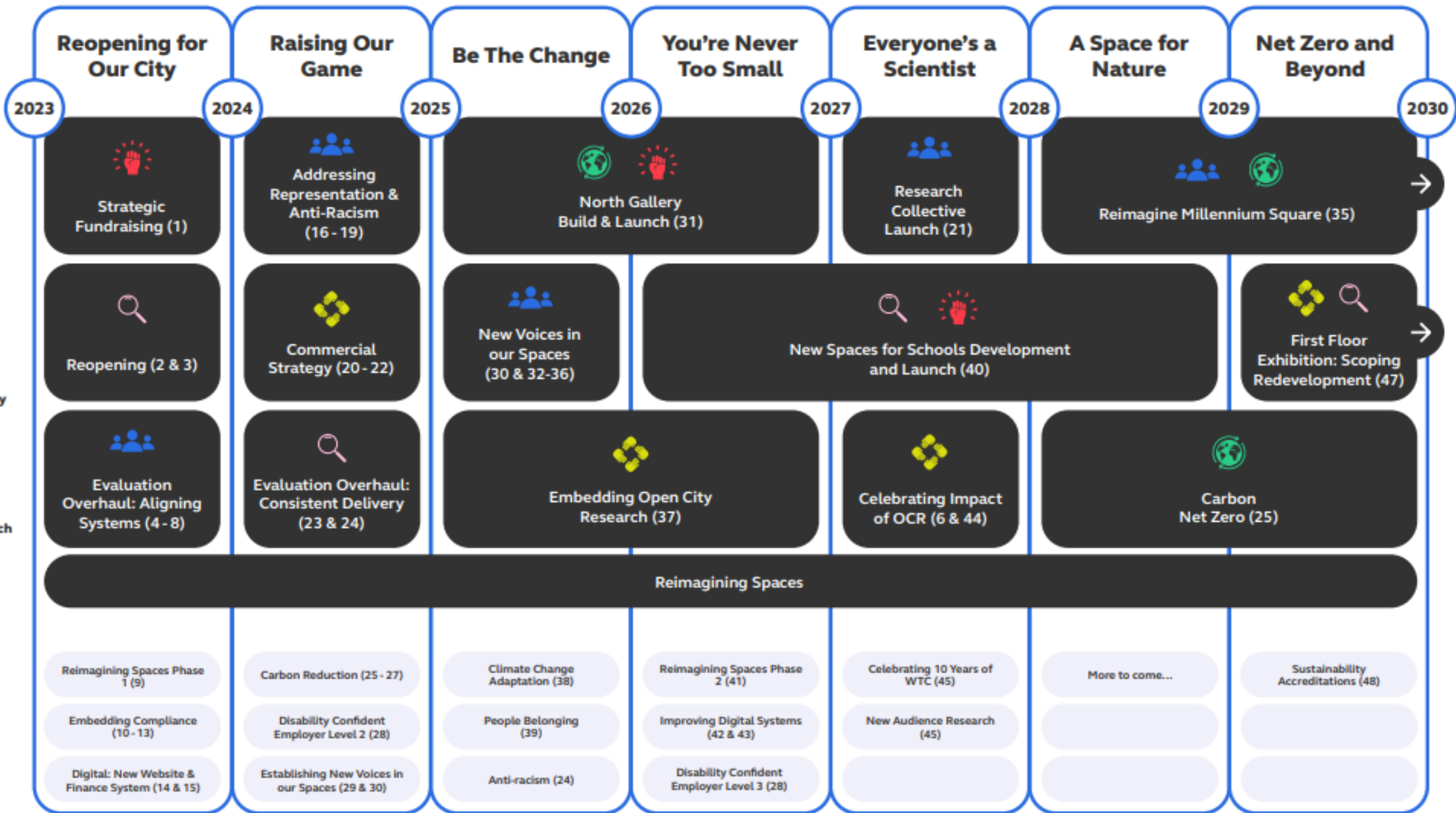
Annual Themes

Key Projects

Manifesto Pledges

-  Build Resilience
-  Cultivate Curiosity
-  Include Everyone
-  Sustainable Futures
-  Open City Research (OCR)

Getting our house in order



Decarbonising our science centre

**Current goals and
approach to
decarbonisation**

**Net zero by 2030 –
mitigation**

**Climate Resilient –
adaptation**

First things first

Measure

The Consultants approach



What we did



Advantages of target setting first

Funding opportunities

Partnerships

**Ambition drives
change**

Buy in

Disadvantages of target setting first

**Not understanding
what is needed**

**Potential
greenwashing**

Reputational risk

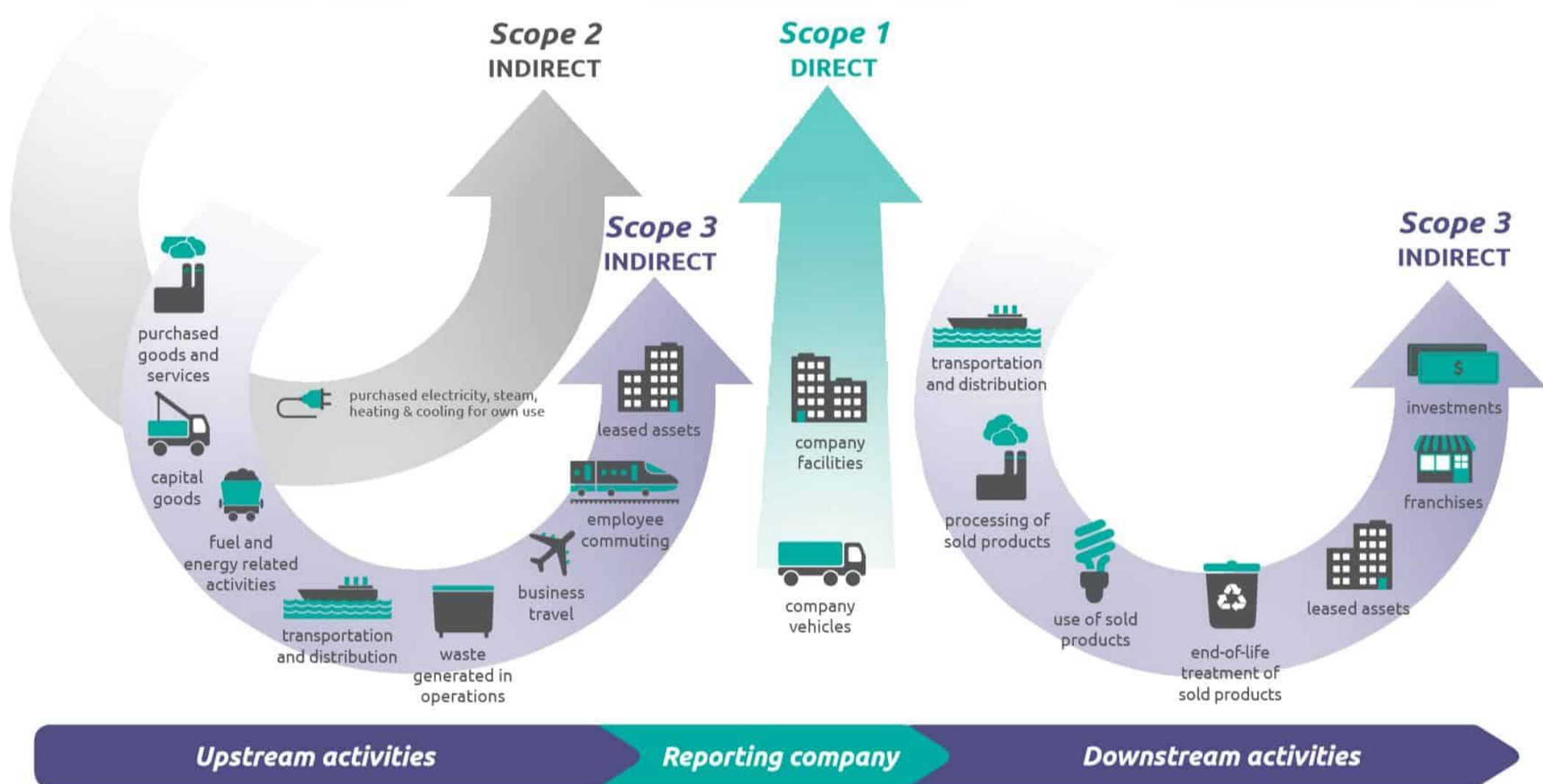
Measure

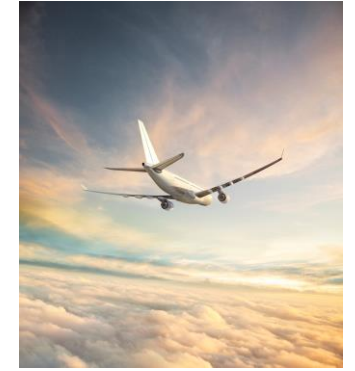
**Green House Gas
(GHG) Protocol**

**SECR – Larger
companies in UK**

**EU – CSRD (large
companies)**

**Science Based
targets Initiative**



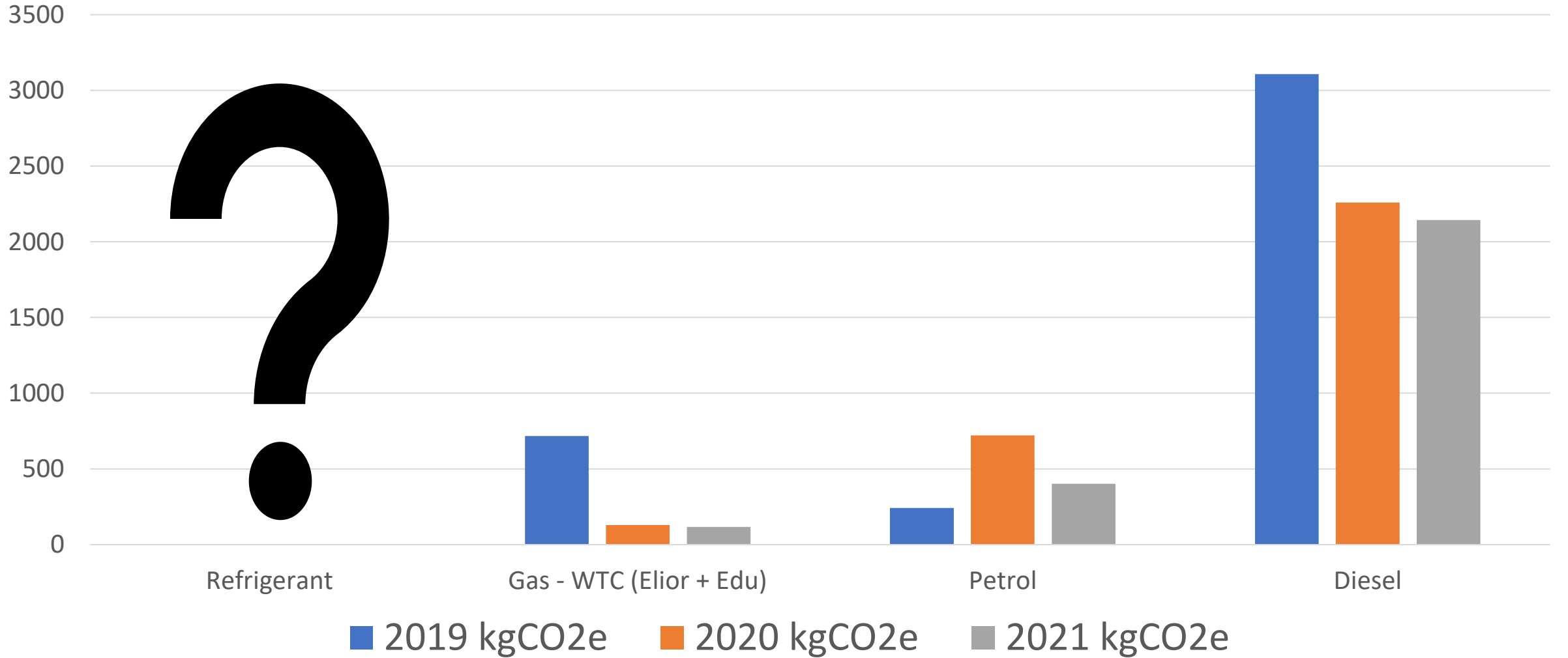


Scope 1

Scope 2

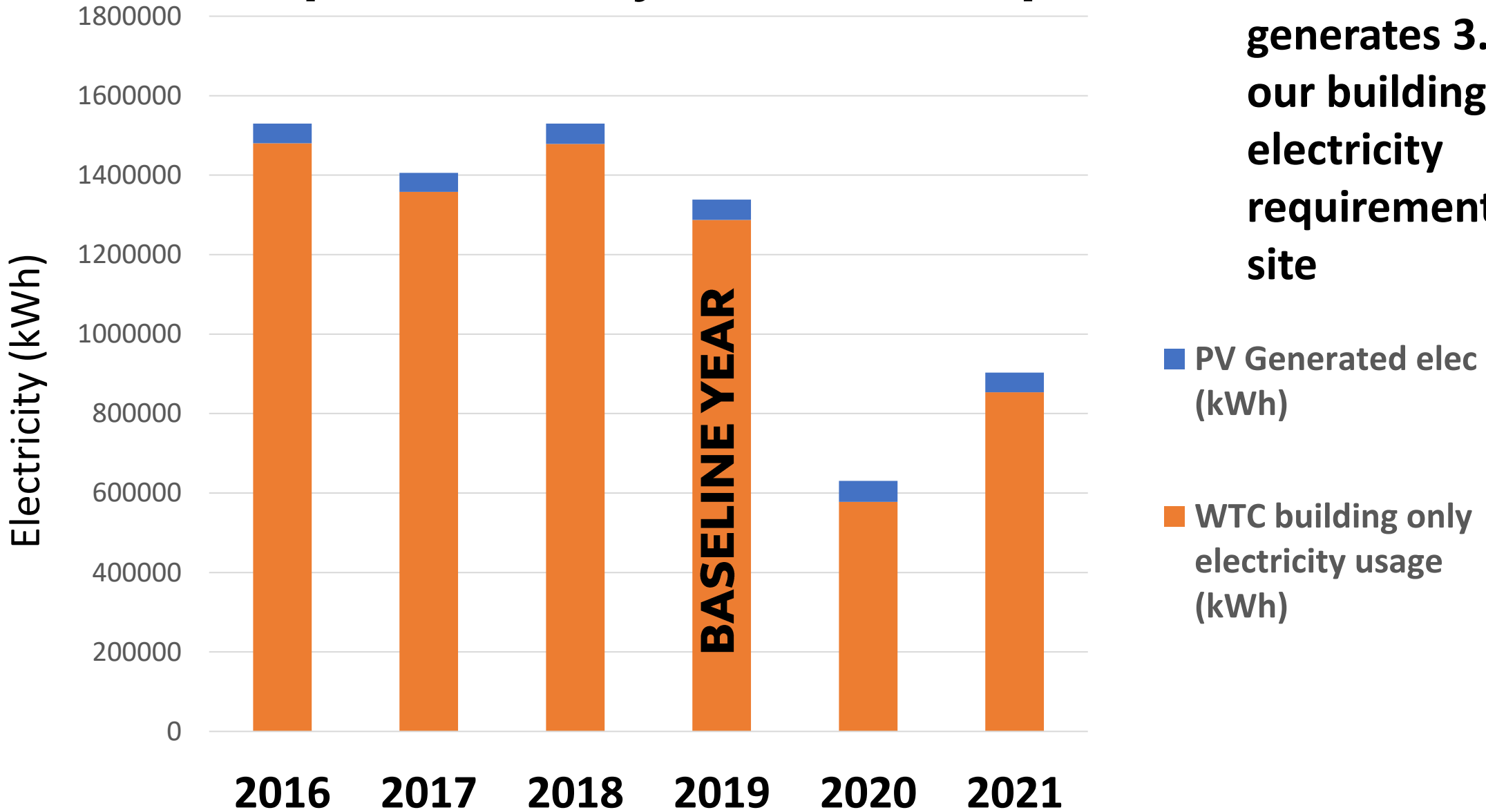
Scope 3

Scope 1 - kgCO2e

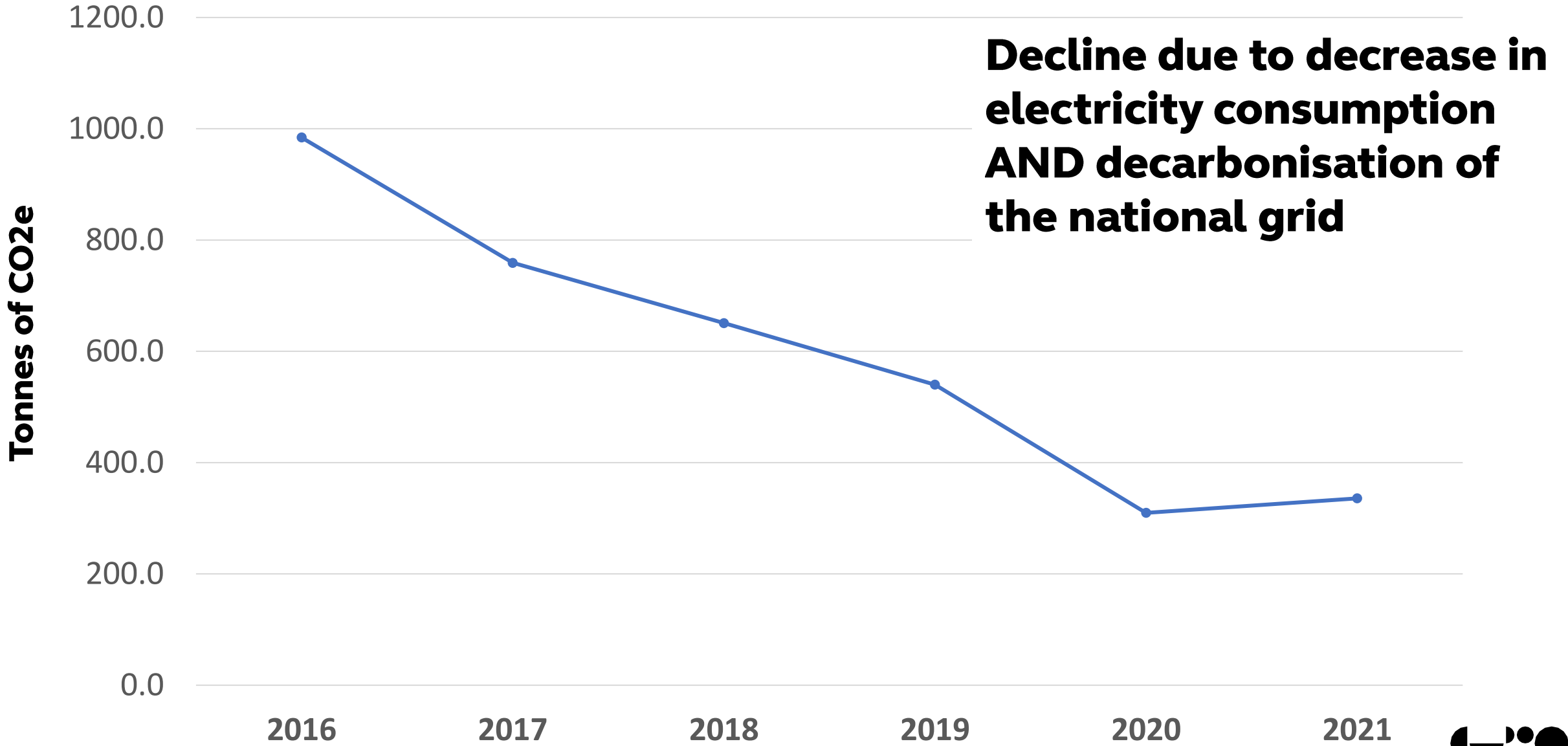


Scope 2- Electricity + Solar consumption

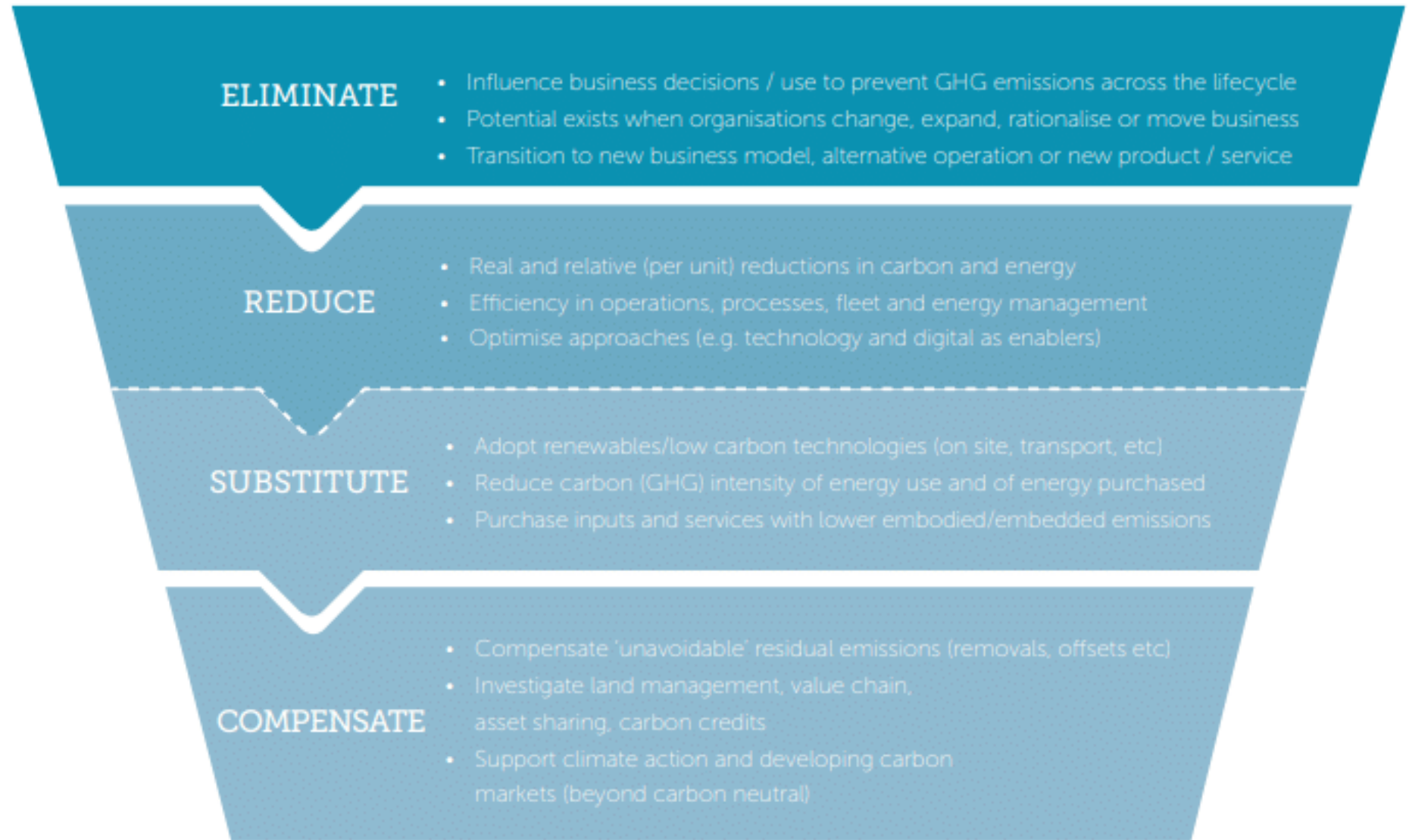
Old solar array generates 3.5% of our buildings electricity requirements across site



Carbon Emissions associated with Electricity consumption



IEMA Greenhouse Gas Management Hierarchy (updated 2020)



Decarbonisation hierarchy (IEMA)

Scope 1 decarbonisation

Removed gas from our building

Replaced nearly all diesel and petrol equipment with electric

Second-hand electric vehicles, rent extra when needed

Scope 2 decarbonisation



Image credit: Bristol Live

Scope 2 decarbonisation



**Saved 4% annual
electricity usage**

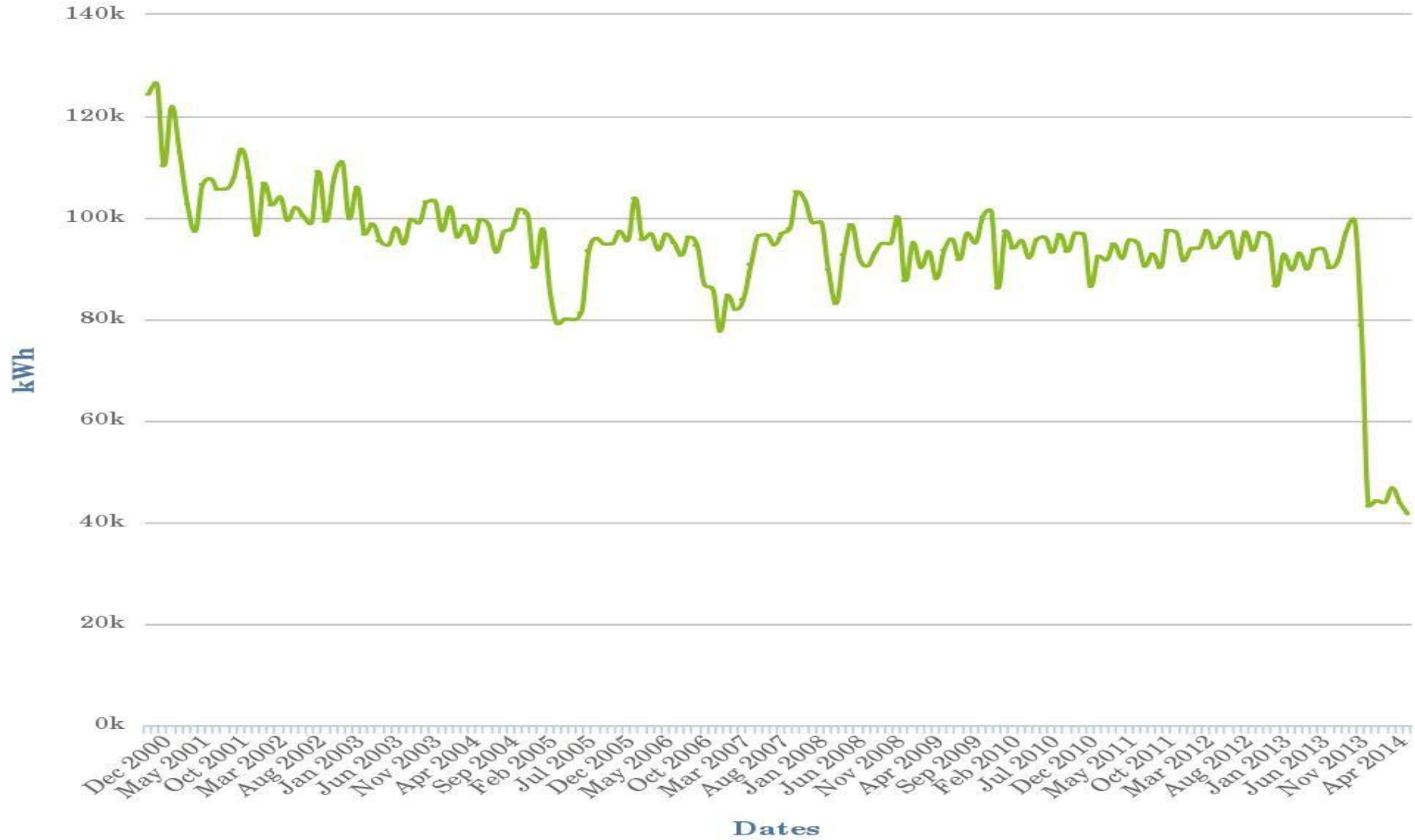
Image credit: The Square

LED car park



LED car park

Consumption



At-Bristol Car Park: Car Park Electricity

Scope 2 decarbonisation

**LED lights – internal, external
+ car park**

**Train staff on how to turn off
sections of the building for
events**

**Internal signage encouraging
staff to turn off lights, use
stairs**

**Cleaning teams trained on
how to turn equipment on/off**

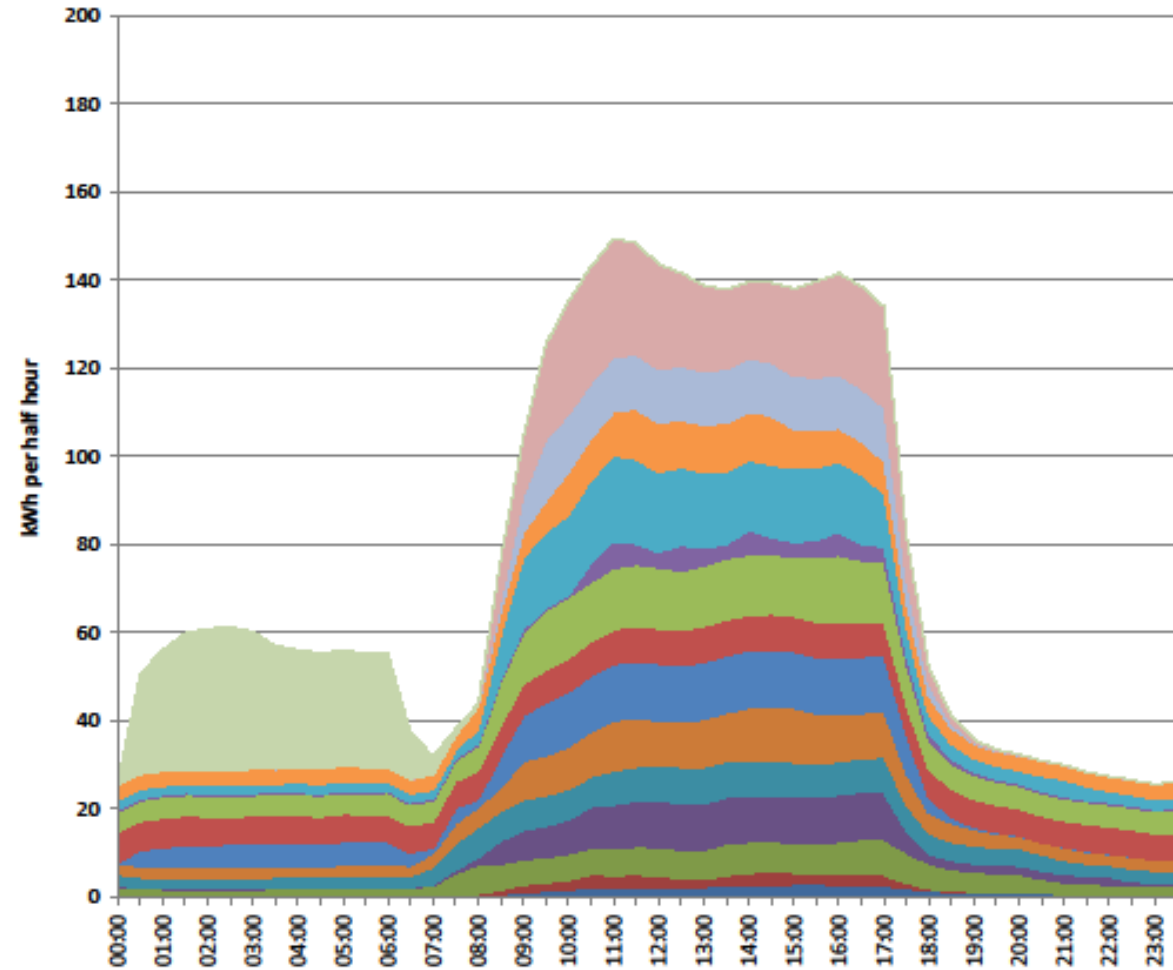
**Solar panels (and now
increase size)**

Energy monitoring system + Typical

Around
140
sensors

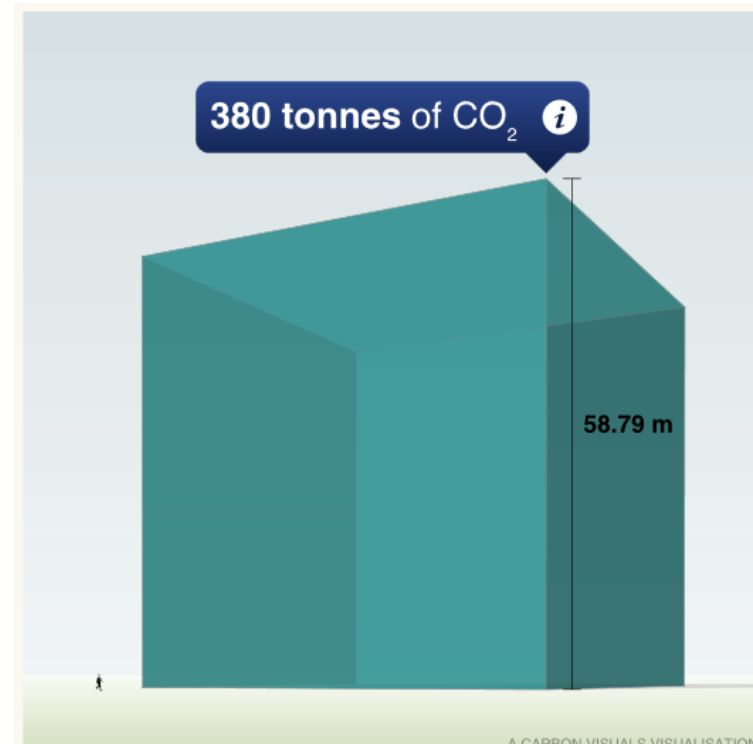
- Air source heat pumps
- Exhibition heating/cooling
- Ventillation fans
- Kitchens
- Venue Hire
- Planetarium
- Exhibition power
- IT (inc Big Screen)
- Circulating pumps
- 1st general power
- Gnd gen light & power
- Exhibition light
- 1st general light
- Office heating/cooling
- Annexe offices

Explore Power Consumption by Half Hour 18/01/2011



Energy reduction since 2011

31%



All grid supplies 100% UK clean renewable
electricity



Scope 3

Upstream

- 1. Purchased goods and services**
- 2. Capital goods**
- 3. Fuel and energy related activities
(not included in scope 1 + 2)**
- 4. Upstream transportation and
Distribution**
- 5. Waste generated in operations**
- 6. Business Travel**
- 7. Employee Commuting**
- 8. Upstream Leased Assets**

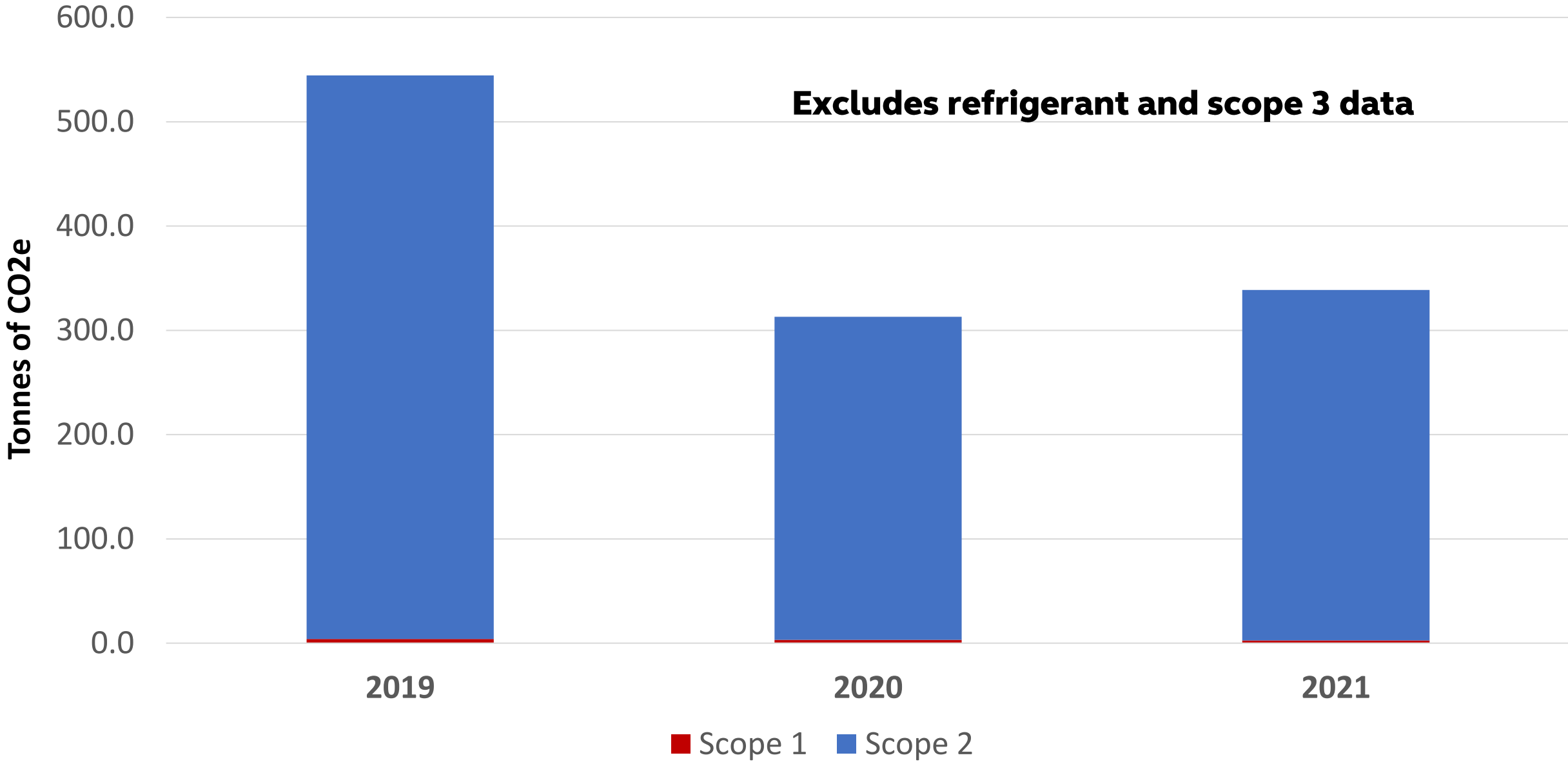
Downstream

- 1. Downstream transportation and
distribution**
- 2. Processing of sold products**
- 3. Use of Sold products**
- 4. End of life treatment of sold products**
- 5. Downstream leased assets**
- 6. Franchises**
- 7. Investments**

Scope 3

**3 – business travel,
employee and visitor
travel, procurement,
waste, investments,
assets, pensions, data**

Scopes 1 + 2 Tonnes of CO2e



Scope 3

Banned internal flights

Travel hierarchy

Water reduction

Waste reduction

Sustainable Procurement

2022

Carbon baseline

Net zero pathway established

All vehicles electric

Research climate adaption

2023

No more gas in main building

Low carbon food menus

Develop net zero training for other centres

2024

Develop circular economy model for gift shop

More EV charge points in car park

All offsite data services are net zero

2025

End gas usage in leased buildings

2026

Circular economy shop launch

Establish carbon offset scheme






Reimagine carpark space for more sustainable transport

We The Curious Plan 2030

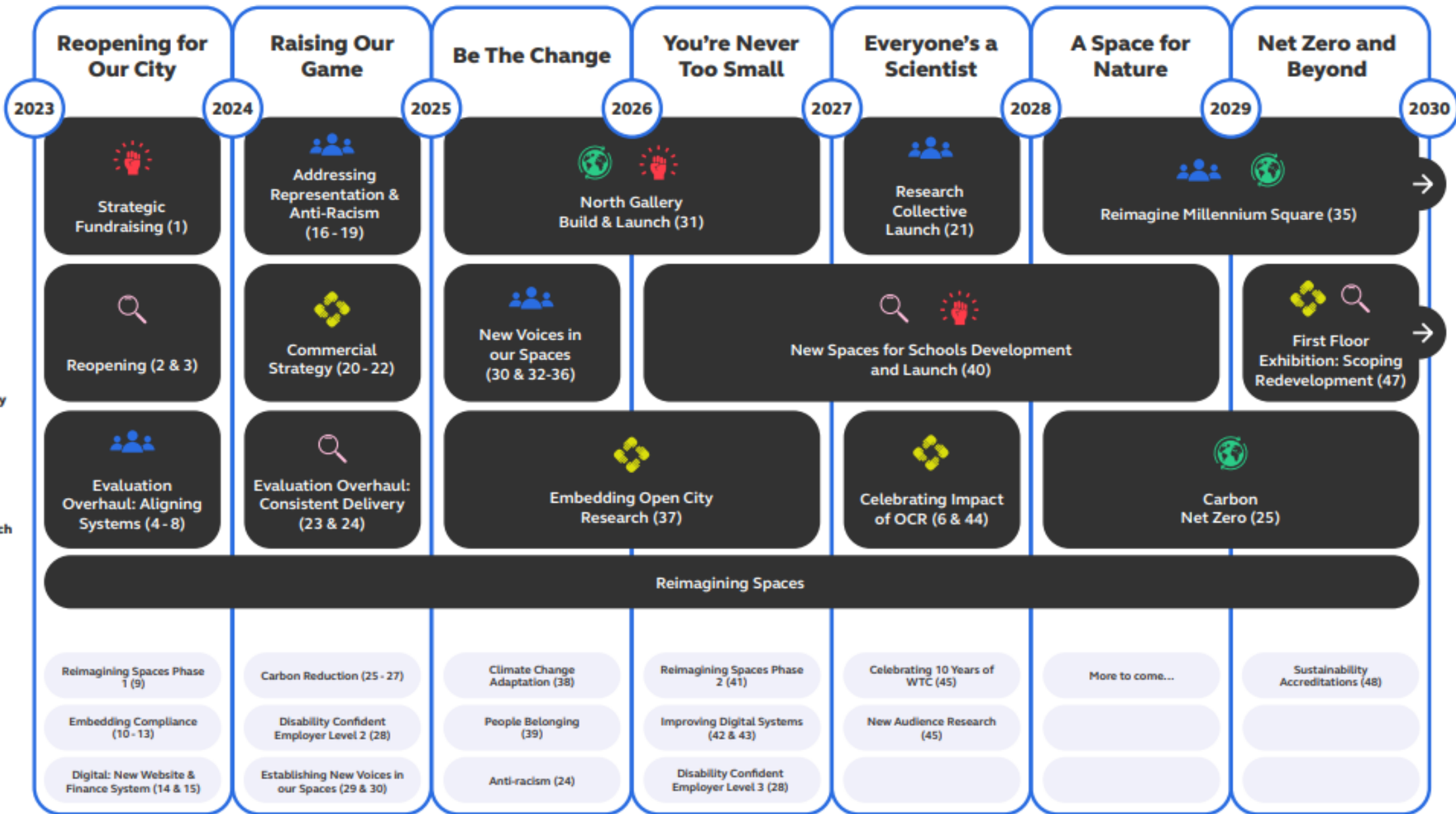
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Getting our house in order



Resources for getting started

[Green House Gas Protocol](#)

[SME Climate Hub](#)

[Normative – legislation tracker](#)

[Bristol Green Capital Partnership](#)

[Science Based Targets Initiative \(SMEs\)](#)

