



Module Three TfL

What are we doing in TfL?

Sources of Carbon: Scope 1, 2, 3 emissions

What can your business area do?



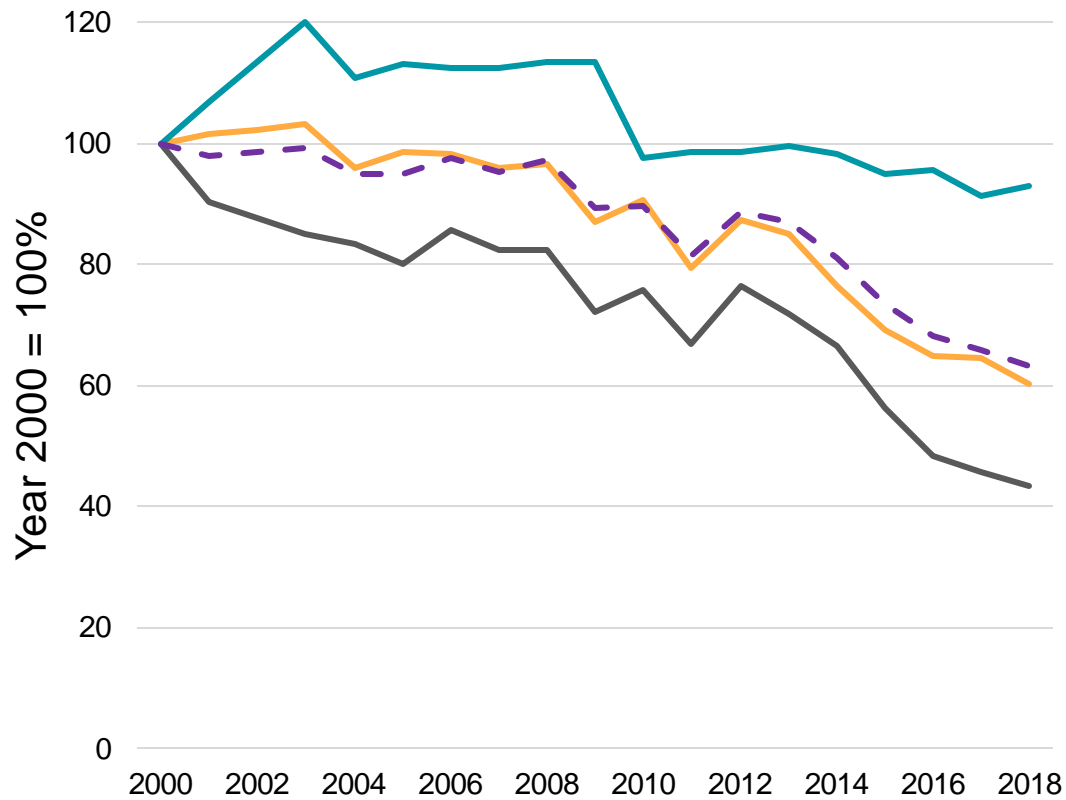
We are going to talk London & TfL



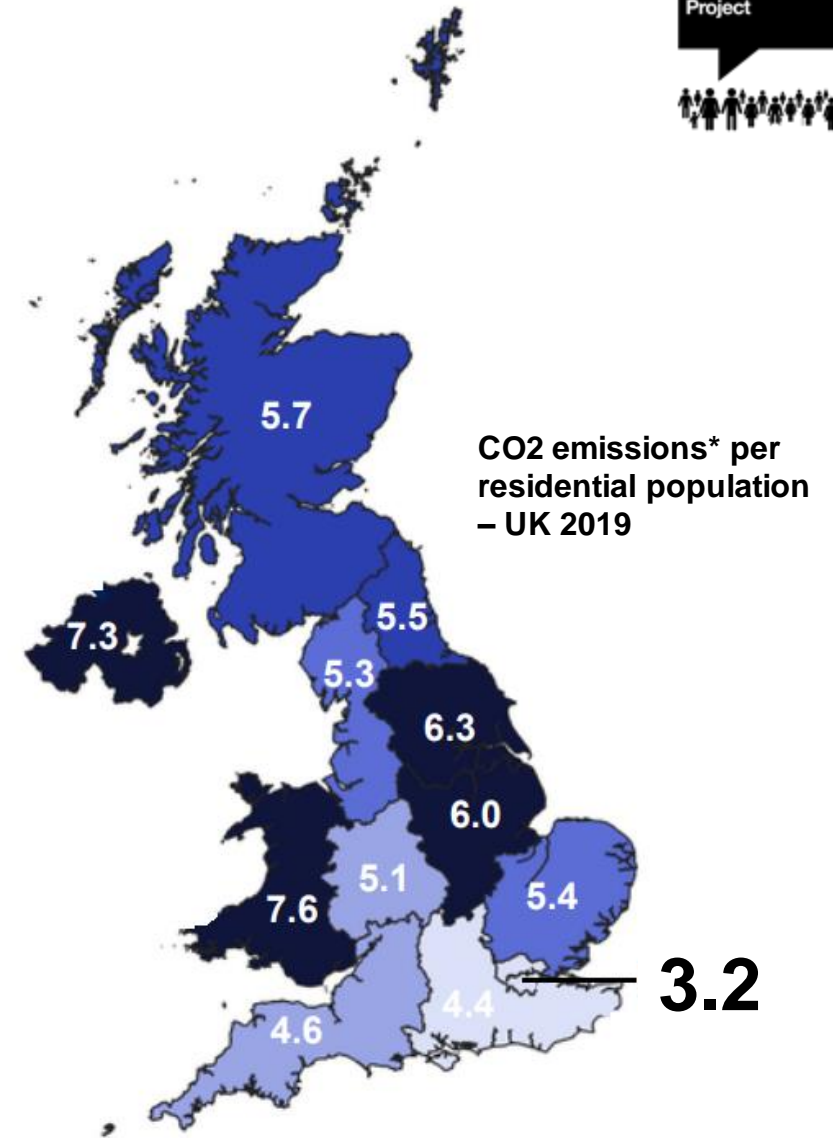


Carbon Emissions in London

Change in London's Carbon Emissions since 2000



- Domestic
- Industrial and Commercial
- Transport
- - Total

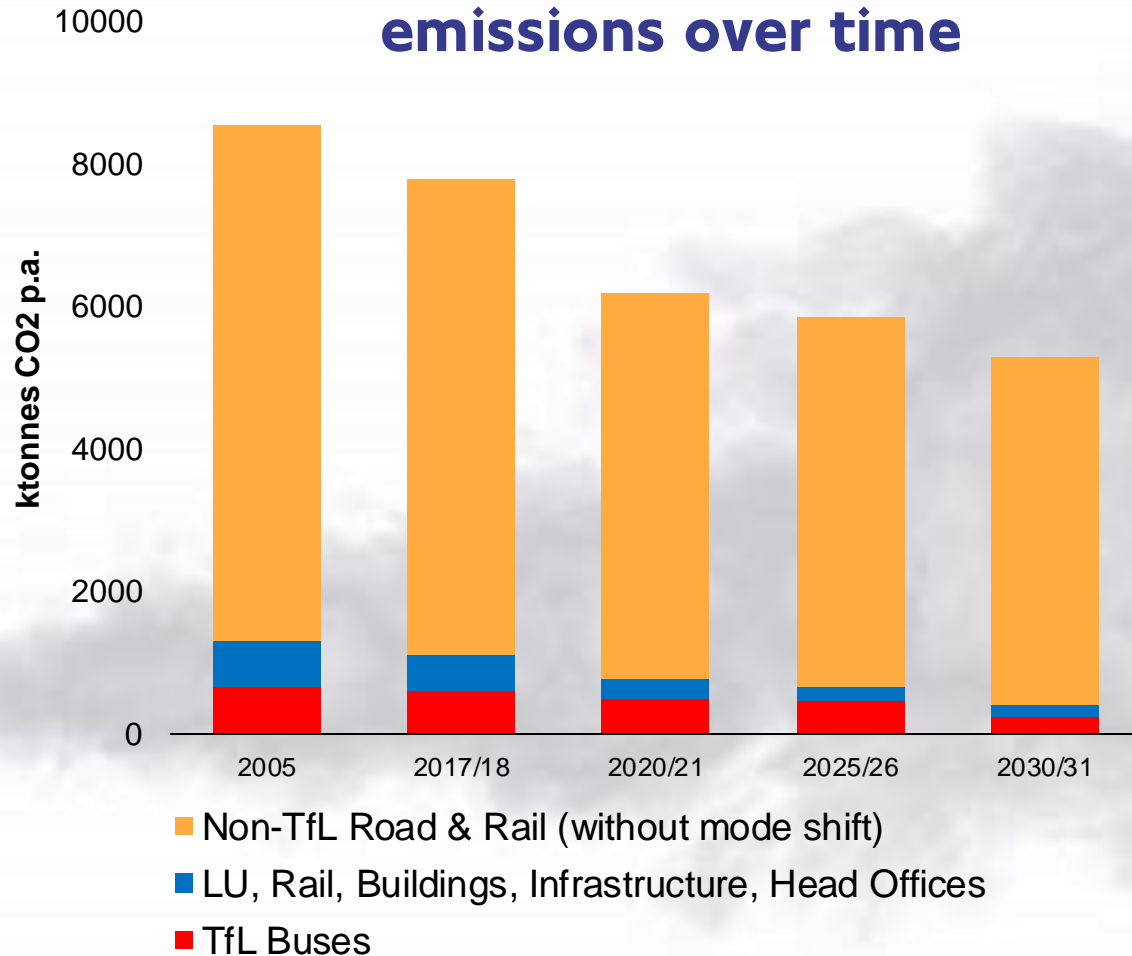


*based on territorial emissions
 – not including impact of imports and exports



Transport Emissions in London

London transport CO₂ emissions over time



Carbon efficiency by mode





What can we do to impact carbon at TfL?

1. Do what we do - well

Lines	Stations
Bakerloo	Good service
Central	Good service
Circle	Good service
District	Good service
Hammersmith & City	Good service
Jubilee	Good service
Metropolitan	Good service
Northern	Good service
Piccadilly	Good service
Victoria	Good service
Waterloo & City	Good service
London Overground	Good service
Elizabeth line	Good service
DLR	Good service
Tram	Good service

2. Decarbonise





Module Three TfL

What are we doing in TfL?

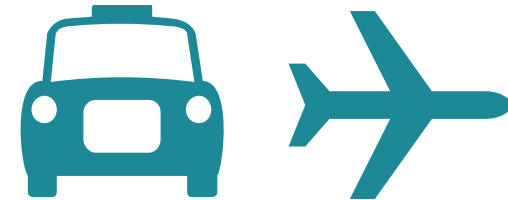




TfL's influence on carbon



Carbon





Talking carbon: Scope 1, 2, 3 emissions

TfL
Operations



Scope 1: we burn stuff

greenhouse gases we emit directly, such as running gas boilers in offices or diesel engines in buses

Scope 2: someone burns stuff to make our electricity

greenhouse gases which are caused indirectly by a company. This includes non-renewable electricity purchased by the company



TfL's Infrastructure
and supply chain

London's wider
transport network



Scope 3:

Upstream: our suppliers emit carbon

Downstream: carbon from activities we influence

All the other emissions that are associated with what we do. From what we buy from our suppliers, to the emissions of its customers while using the company's service (in our case, anyone travelling in London!)



Activity: In sector do our activities belong?

TfL's Infrastructure and supply
chain

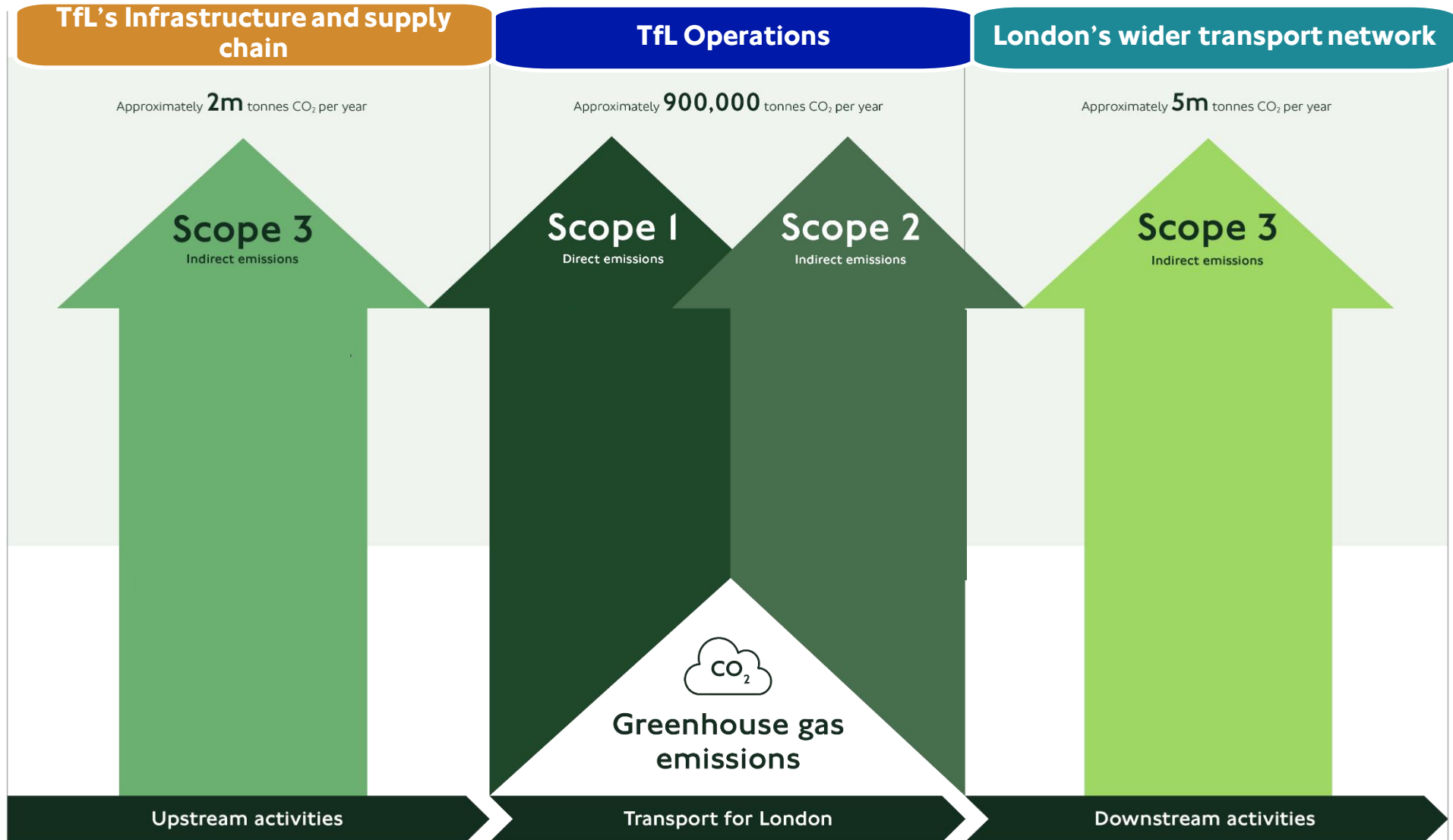
TfL Operations

London's wider transport network

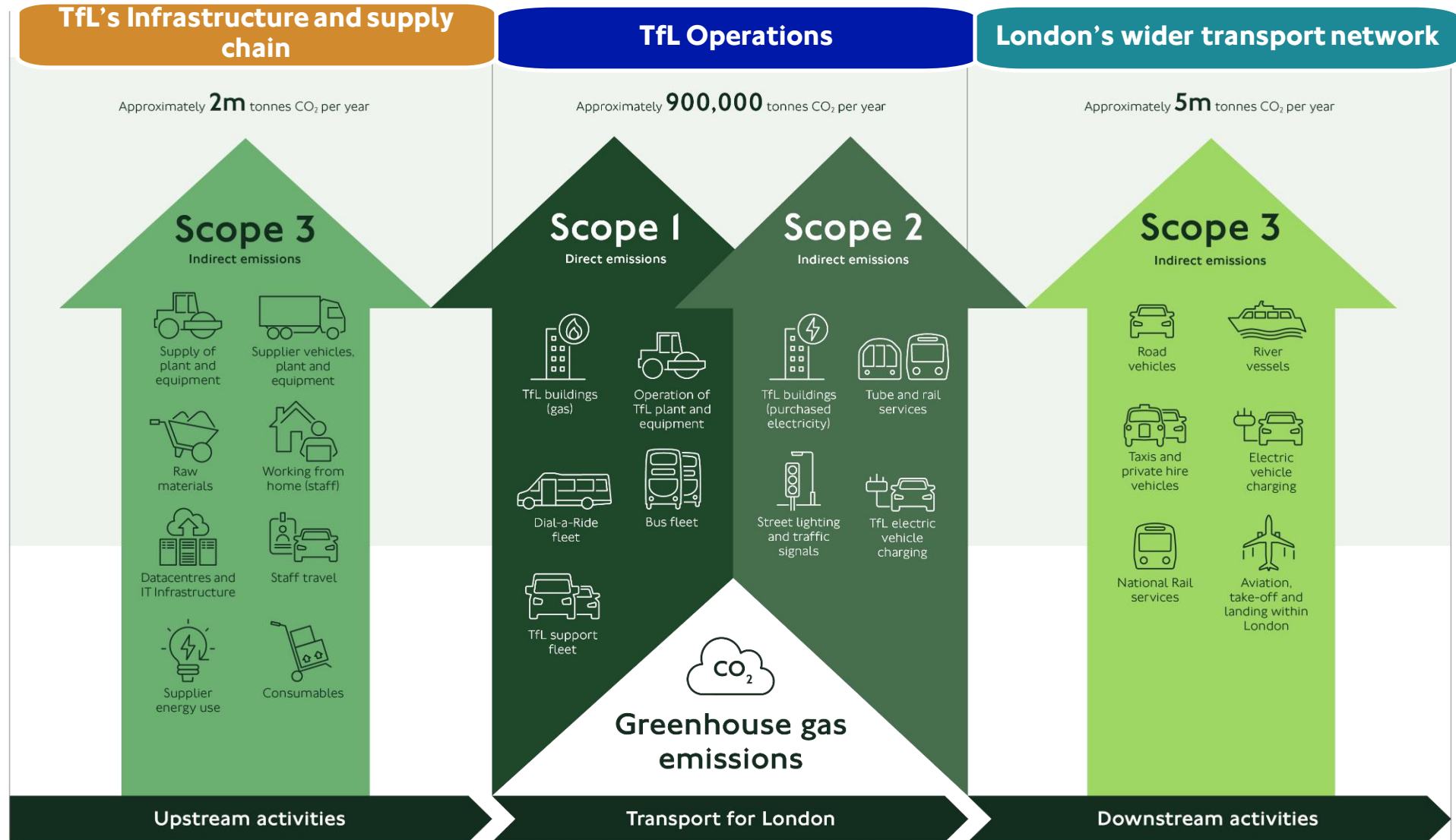
Place your activities on the wall



Scope and reach of our carbon emissions



Scope and reach of our carbon emissions





London and TfL Policy



The Mayor's target for London is to be Net Zero Carbon by 2030, this means:

London's emissions are decreased to as low a level as is possible

Any remaining emissions are then balanced by either:

- removing an equivalent amount of carbon from the atmosphere (negative emissions measures)
- offsetting through investment in carbon mitigation outside the region.

Our Purpose: This is why we exist

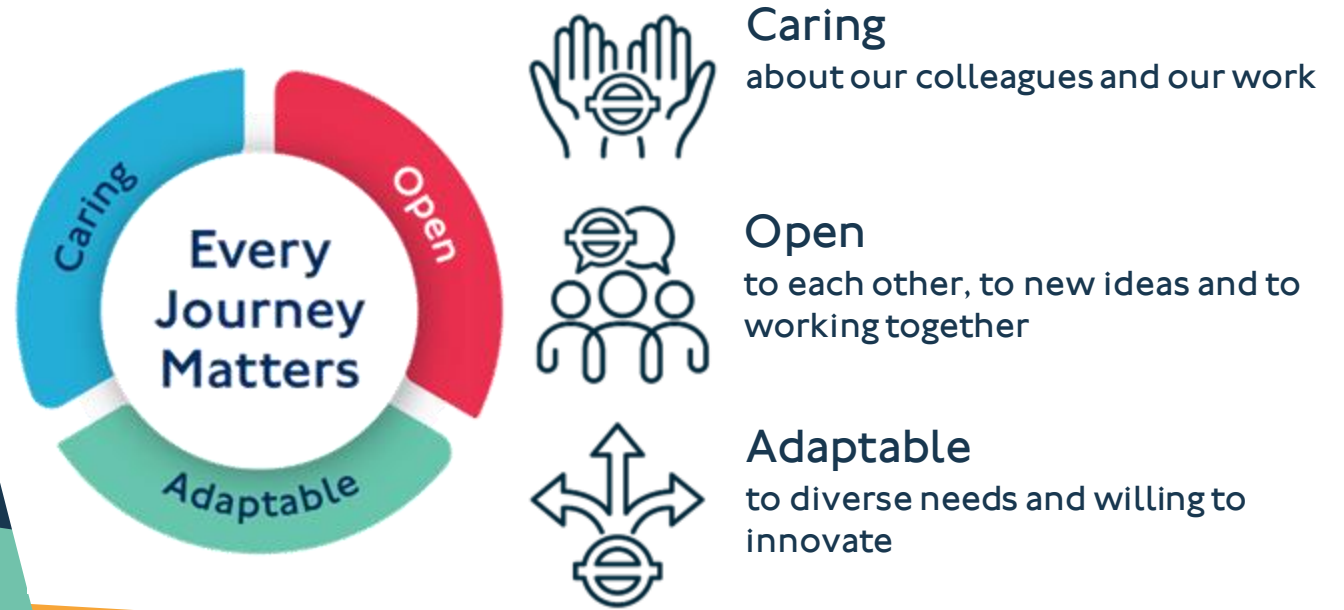
To move London forward safely, inclusively and sustainably

Our Vision: This is the future we'll create together

We'll be a strong green heartbeat for London

Our Values: This is how we work

We are caring, open and adaptable because every journey matters



Our Roadmaps: This is how we'll get there





Sustainable resources



Best environmental practices

Climate emergency



TfL's Environmental Framework



Air quality

Zero-carbon London



Green infrastructure



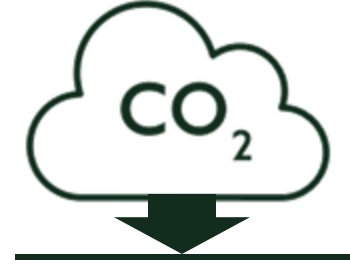
Making it happen

- Make it a core part of TfL culture, advocated by leaders and championed in every team
- Incorporate into standards, specifications, contracts and management systems
- Deliver through business planning, asset management and procurement



TfL's Climate Emergency ambitions:

Reach net zero carbon across all our operations by 2030



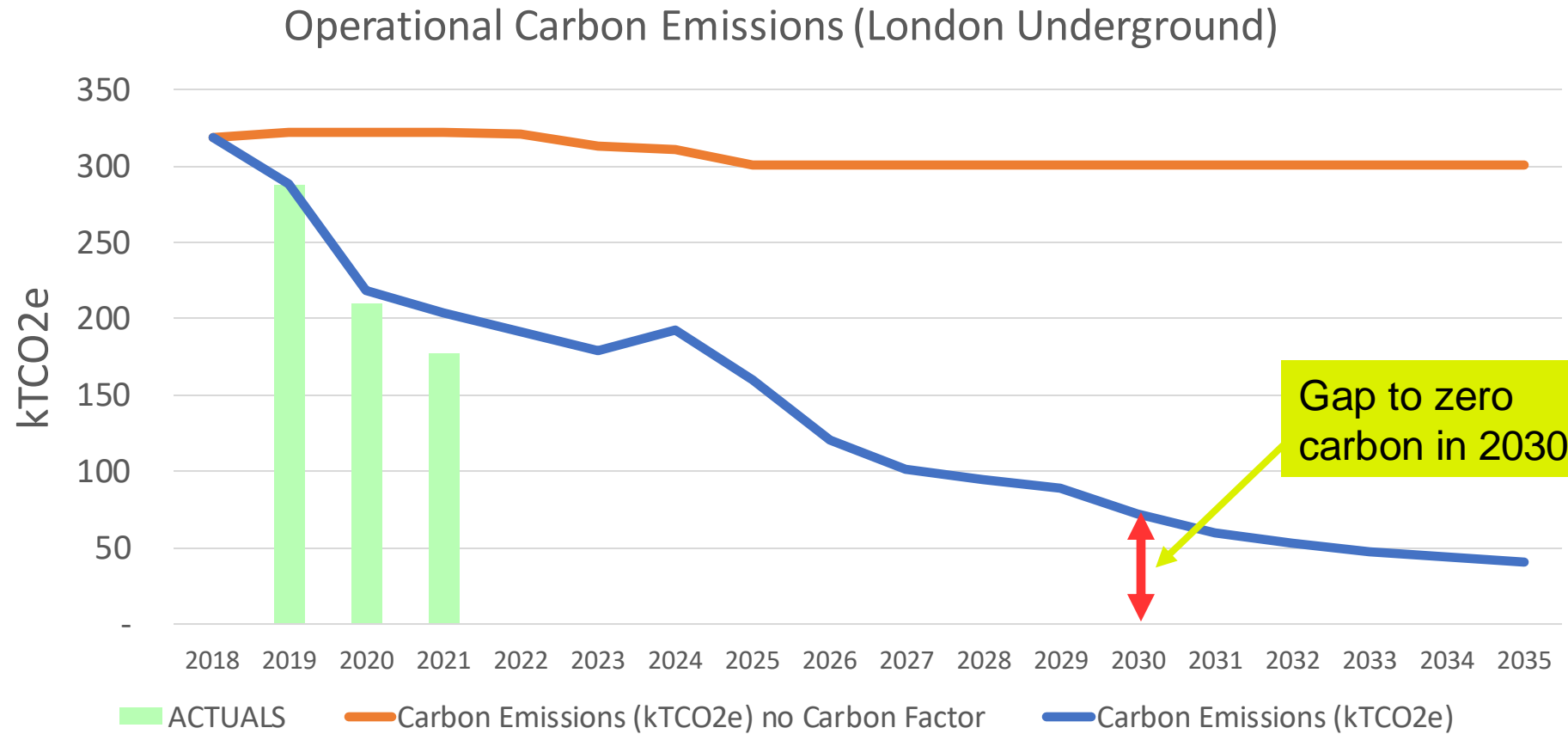
Support London reaching net zero



Be ready for the impacts of climate change on our network



How is TfL performing against these targets

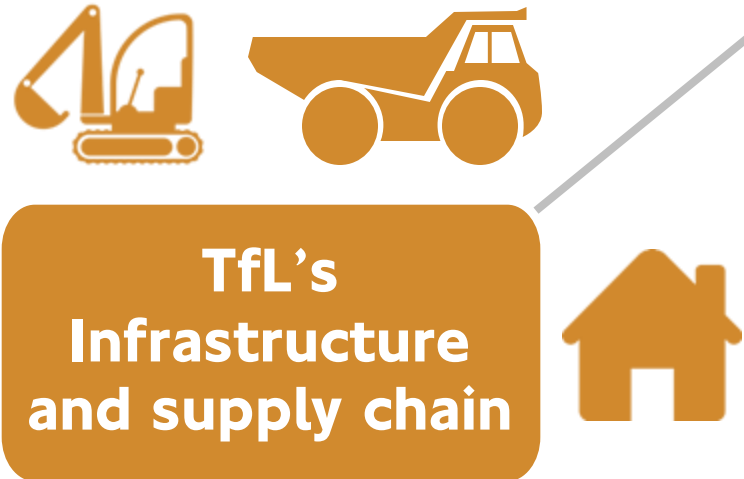




TfL's influence on carbon



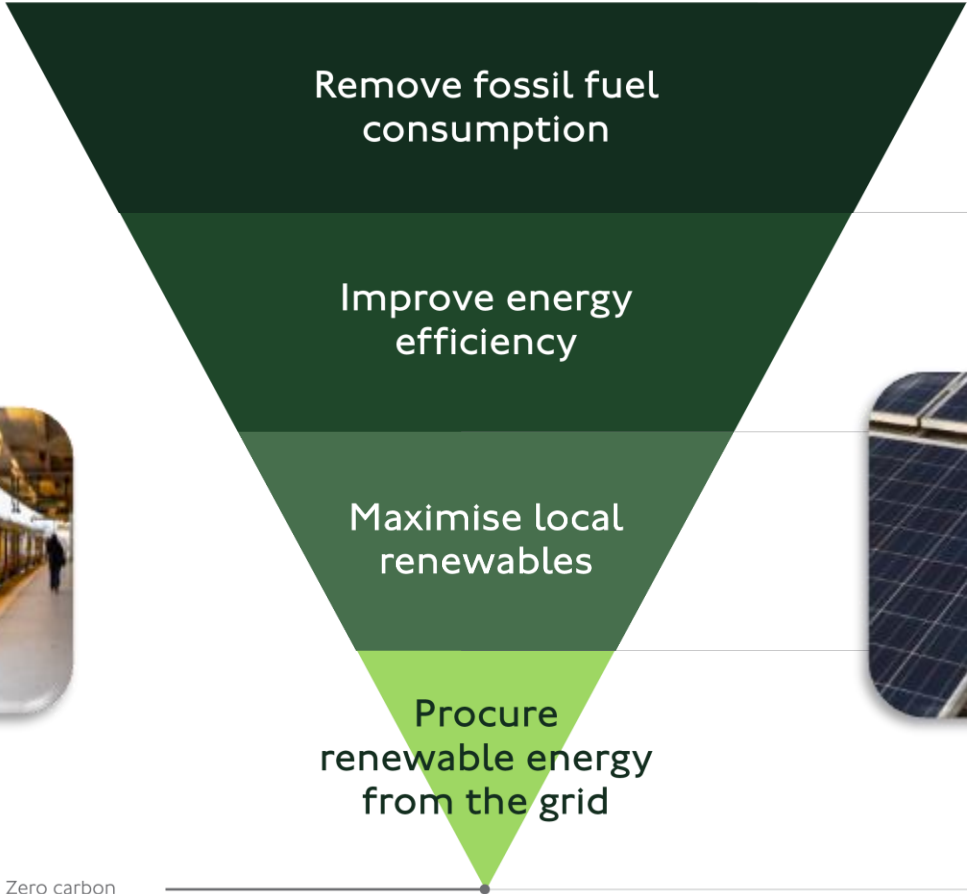
Carbon



TfL's strategy to reduce operational carbon



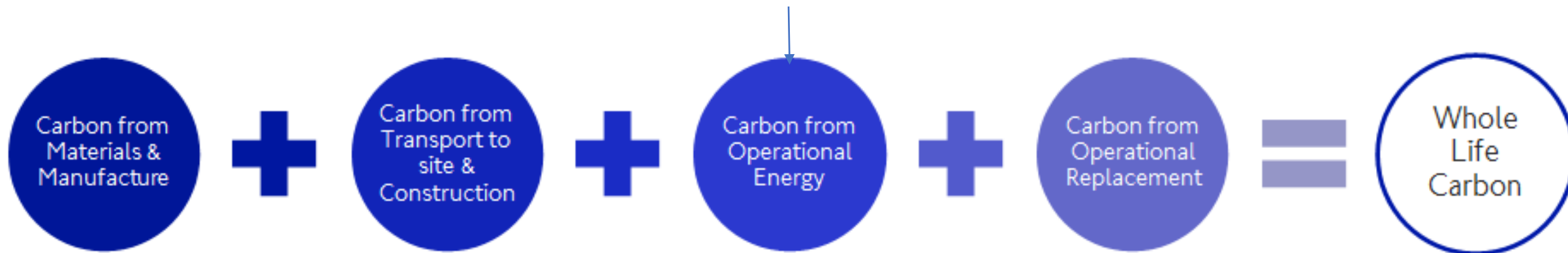
Operational carbon hierarchy





Carbon in construction projects

TfL's 'Whole Life Carbon' footprint is not just due to energy use!



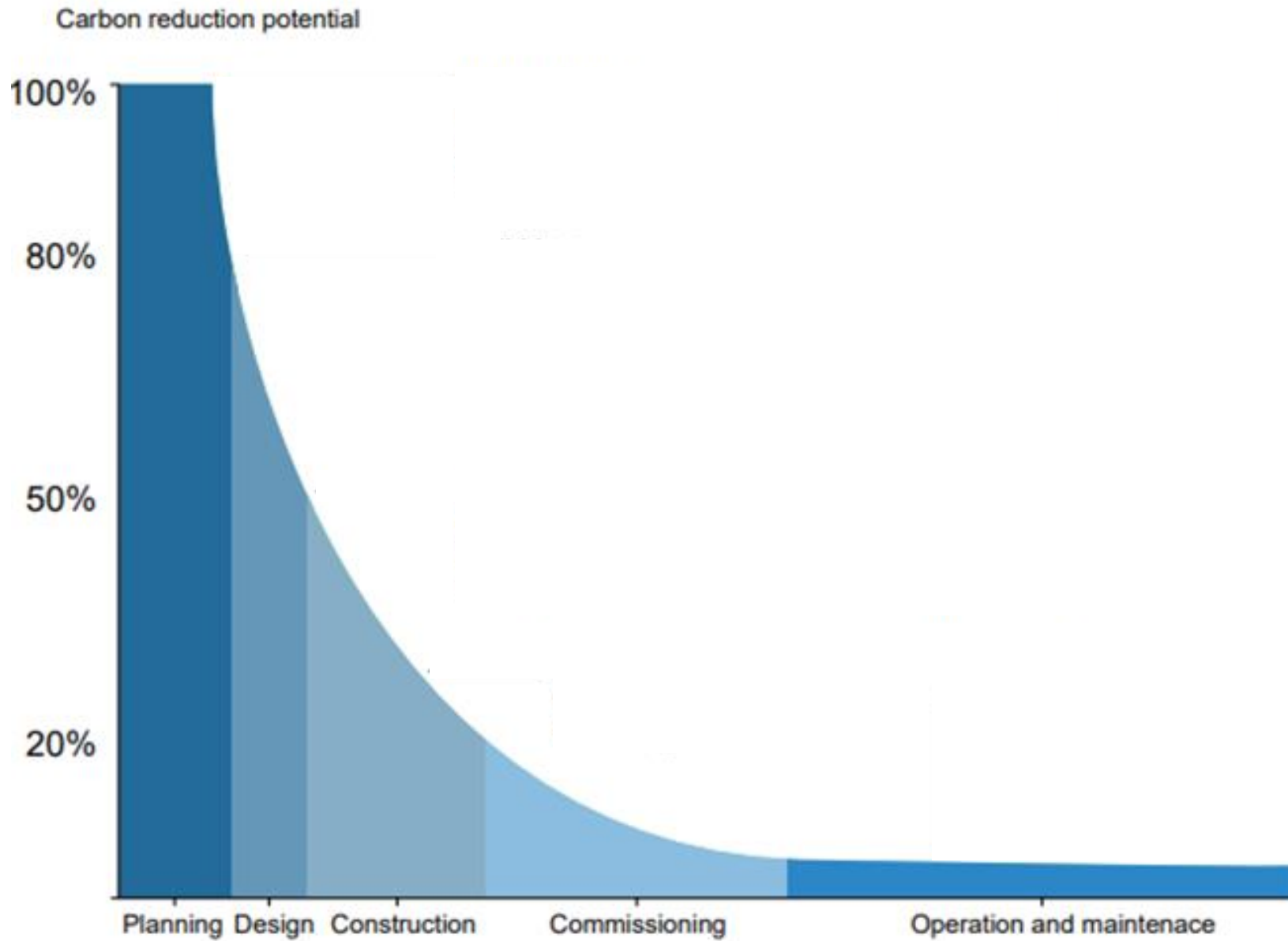
PAS 2080 (2016): Carbon Management in Infrastructure

BSI Standards Ltd & Green Construction Board



Carbon in construction

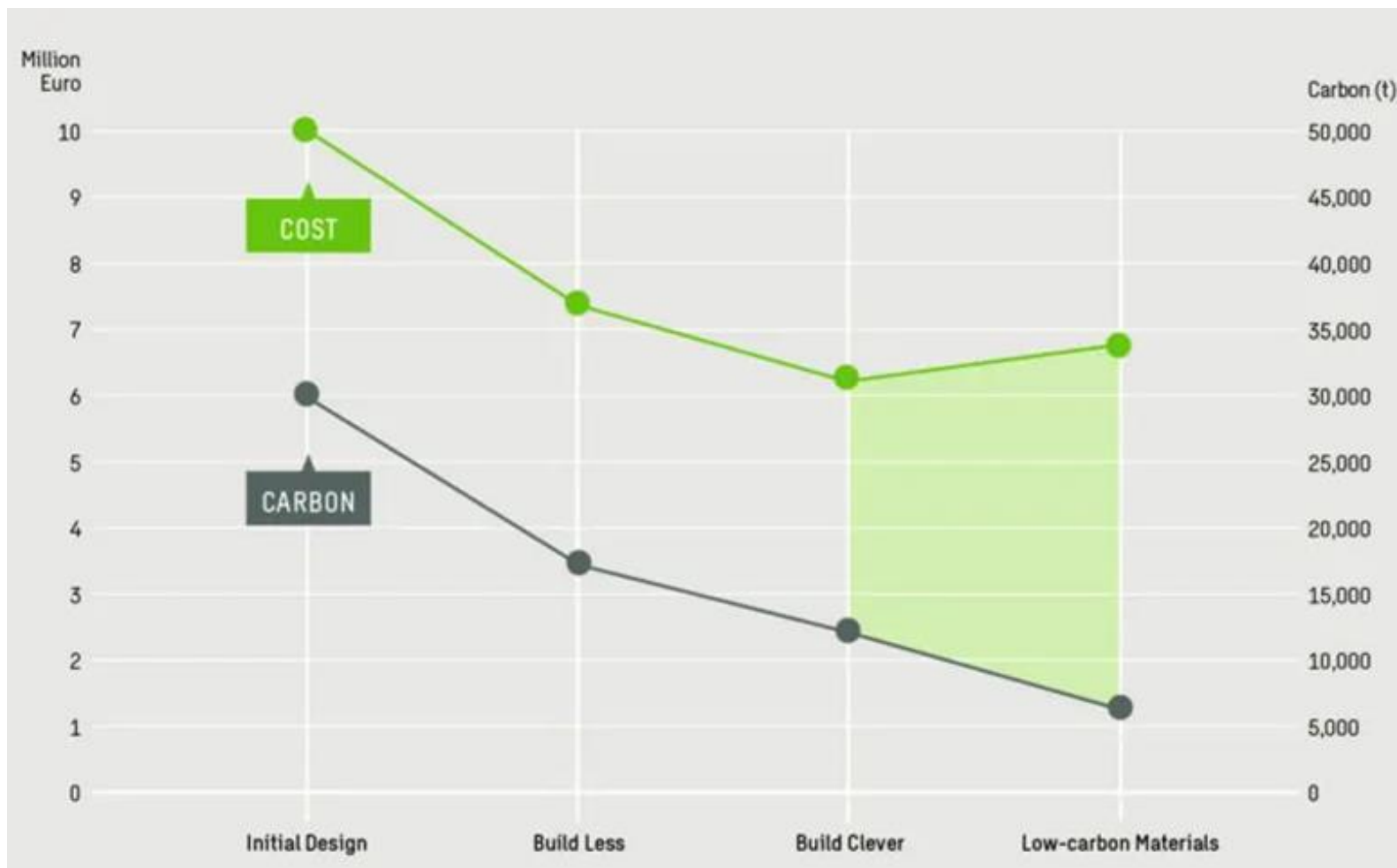
Build / Deliver





Low carbon = Low cost

If low carbon thinking is embedded from the start, the cost will decrease in line with carbon



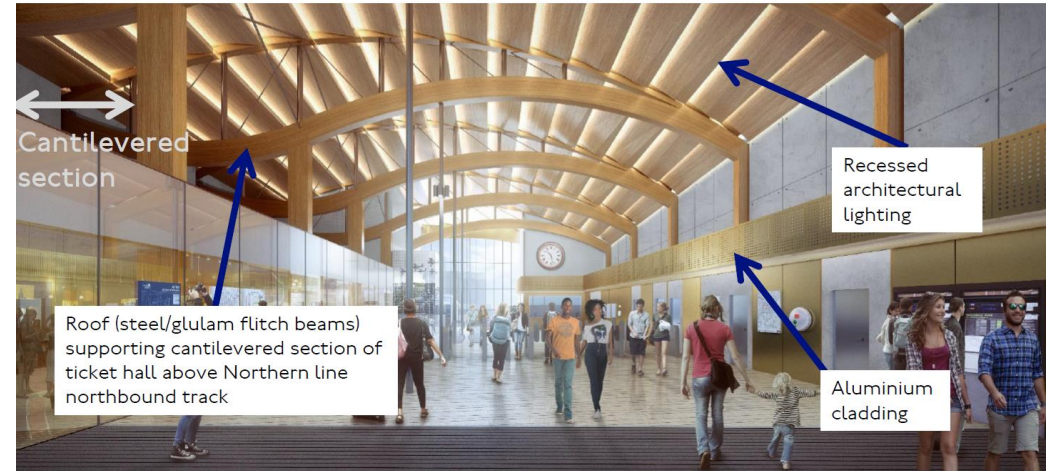
TfL Project's Carbon Reduction Example – Colindale Station

Total 209 Tonnes of CO_{2(e)} saved (-16% vs baseline) due to design changes changes...

2 Original Concept Design – station facade



Original Concept Design – ticket hall



Revised Concept Design - key changes



Revised Concept Design – key changes





TfL priorities for London's Transport Network

Road user charging



Electric Vehicle
(EV) charge points



ULEZ and Congestion
Charge schemes



Improve transport
carbon data





Climate Adaptation

The process of adjusting to current or expected effects of climate change

Flooding example: Alma Road, Enfield: By Enfield Council
Creating rain gardens to reduce the risk of surface water flooding

Before



After





SuDS in action



We all need to embed low-carbon practices to create real change

The actions mentioned in the previous slides are
just a starting point

We must all take action to change our thinking,
ways of working and exert our influence to
achieve the transformative change required

[See Andy Byford talk about the importance of TfL's Green
Future](#)



Extract from Sustainability video





Break





Break video





Module Three TfL

What can your business area do?





Activity: What could your business area do?

What are the main sources of carbon related to the work of your business area?

- 1) Which of these is your business area in direct control of?
- 2) How could your business area influence other areas?
- 3) What can you do?

Who can your department/team influence to take action on climate change?
(other parts of TfL, other organisations)

How can you influence? What techniques could you use?

These ideas may be helpful for your pledge

An illustration of two people, a woman on the left and a man on the right, looking at a globe of the Earth. The woman has curly brown hair and is wearing a yellow top. The man has curly brown hair, glasses, and is wearing a red shirt. They are both holding small white rectangular objects, possibly pieces of paper or cards, near the globe. The background is a light green color with various tools scattered around, including a hammer, a screwdriver, a wrench, and a pencil. There are also some small colorful flowers and a purple bandage on the background.

Carbon Literacy

How could you help TfL cut carbon and tackle climate change?

Would you be confident in making your case and able to support your view with evidence?



Break

