



WILLMOTT DIXON

SINCE 1852

# Property & Construction Summit

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[willmottdixon.co.uk](http://willmottdixon.co.uk)

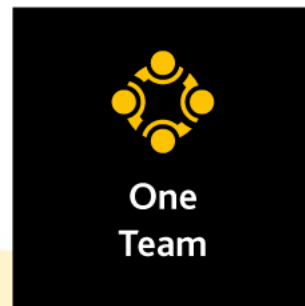




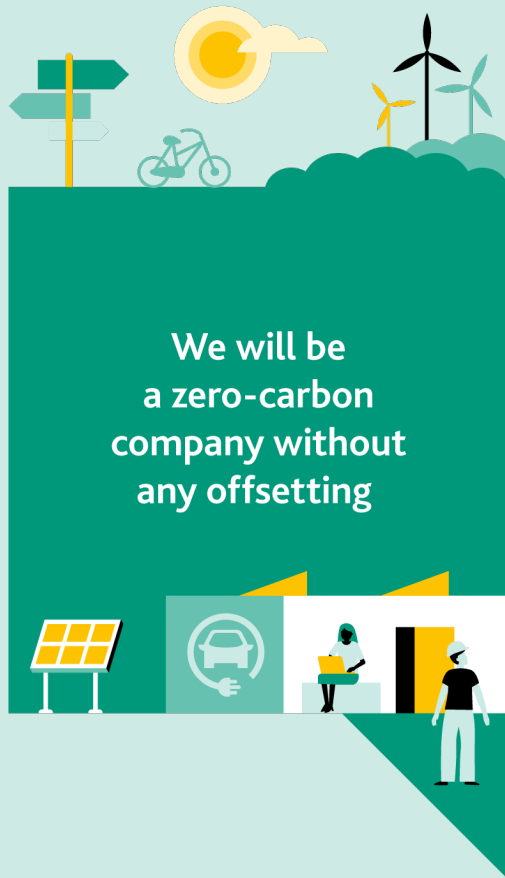


[Now or Never - our drive for change - Bing video](#)

# Themes & Enablers



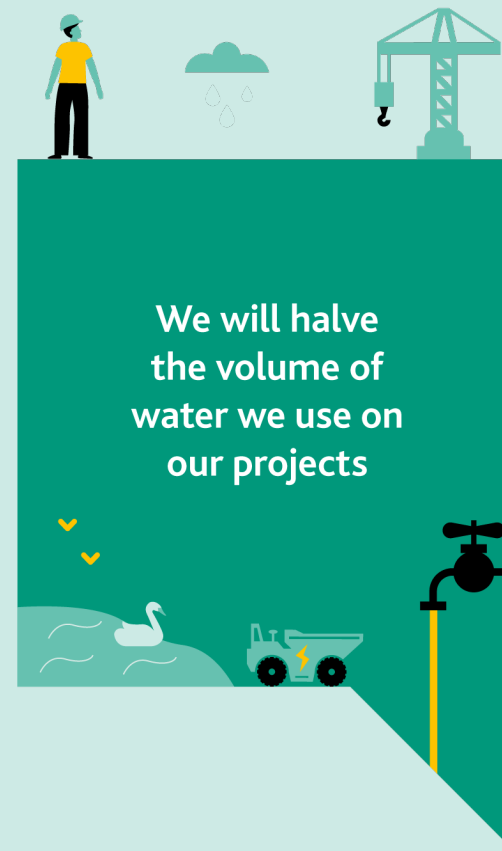
# Better Planet - Our Ambitions



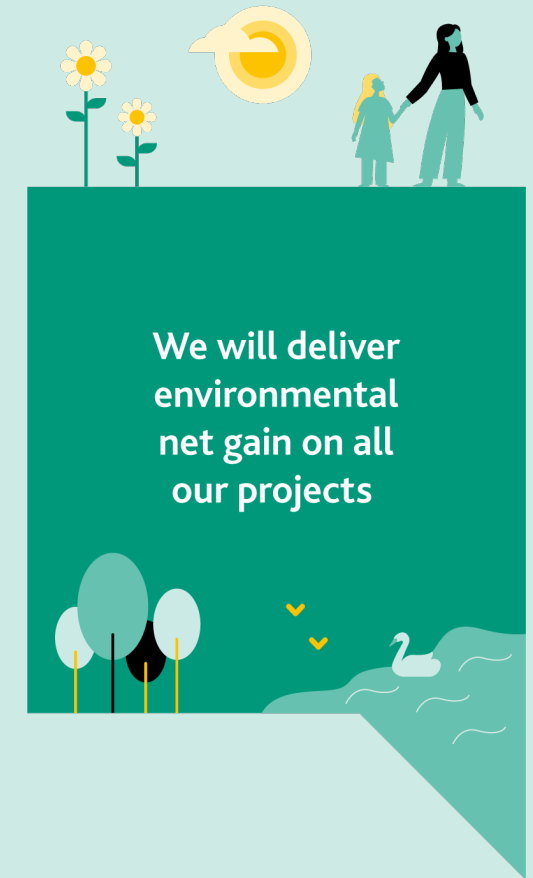
We will be a zero-carbon company without any offsetting



We will generate zero avoidable waste



We will halve the volume of water we use on our projects



We will deliver environmental net gain on all our projects

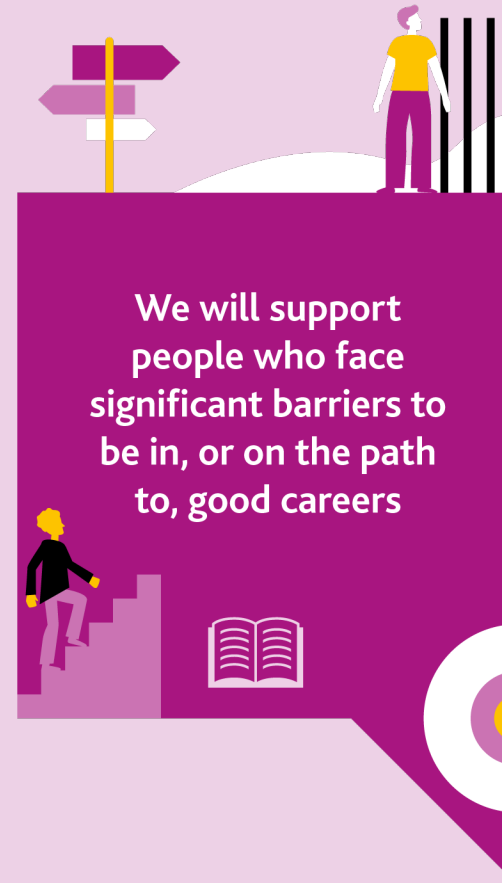
# Building Lives - Our Ambitions



We will deliver high-impact social value which we can demonstrate meets the needs of local communities



How we do business will set the standard for social value in our sector



We will support people who face significant barriers to be in, or on the path to, good careers



Net zero operational carbon

This illustration features a dark blue background with a white building at the bottom. Above the building, there are icons for a solar panel, a wind turbine, and a sun. The text 'Net zero operational carbon' is centered in white.



Future-climate ready  
User health and wellbeing

This illustration features a dark blue background with a white building on the left and a group of people playing basketball on the right. Above the building, there are icons for a snowflake, a sun, and a rain cloud. The text 'Future-climate ready' and 'User health and wellbeing' is centered in white.



Net zero embodied carbon

This illustration features a dark blue background with a white crane and a truck at the bottom. Above the crane, there are icons for a sun, a cloud, and a truck. The text 'Net zero embodied carbon' is centered in white.



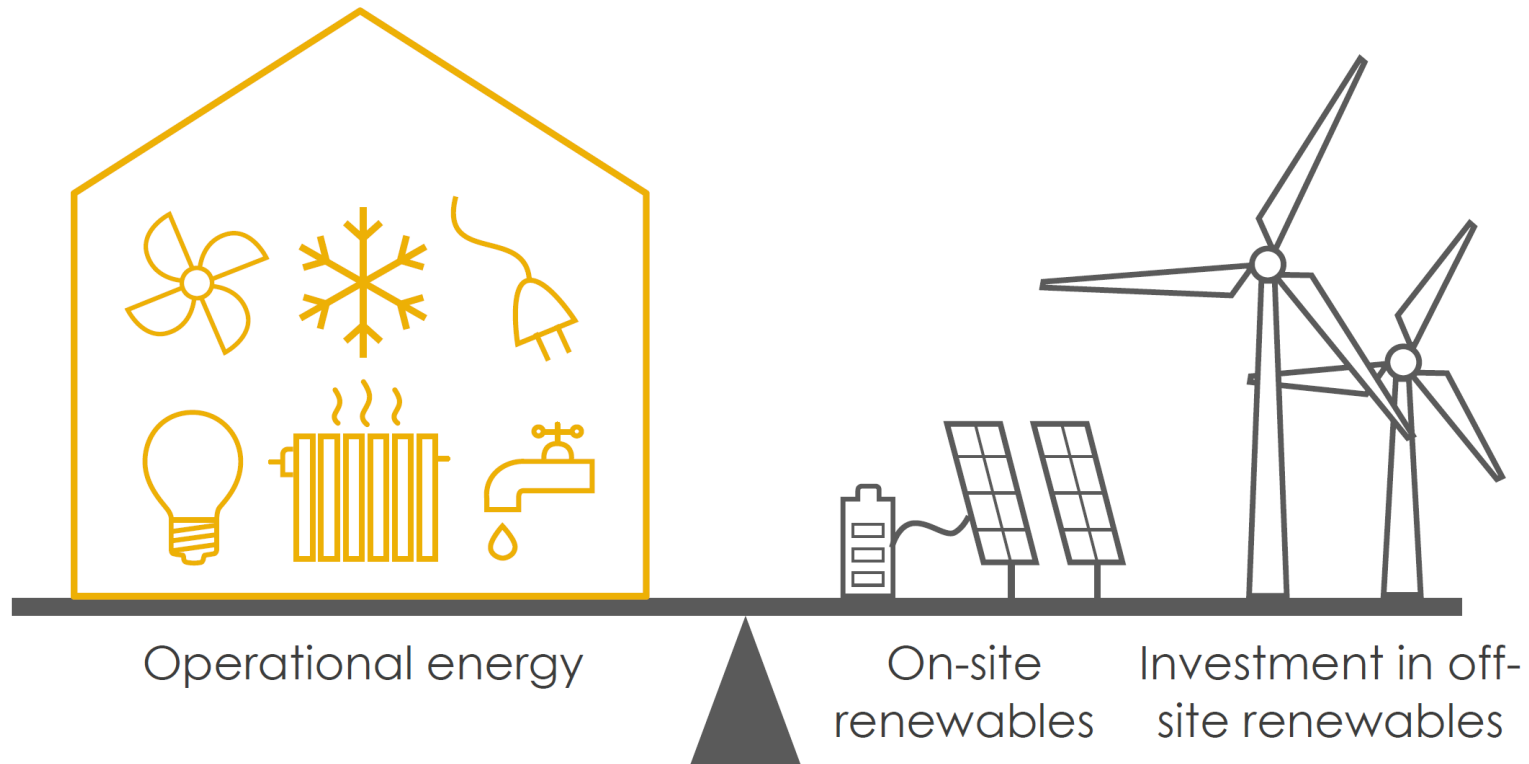
Net zero supply chain

This illustration features a dark blue background with a white recycling symbol and a truck at the bottom. Above the recycling symbol, there are icons for trees and a truck. The text 'Net zero supply chain' is centered in white.



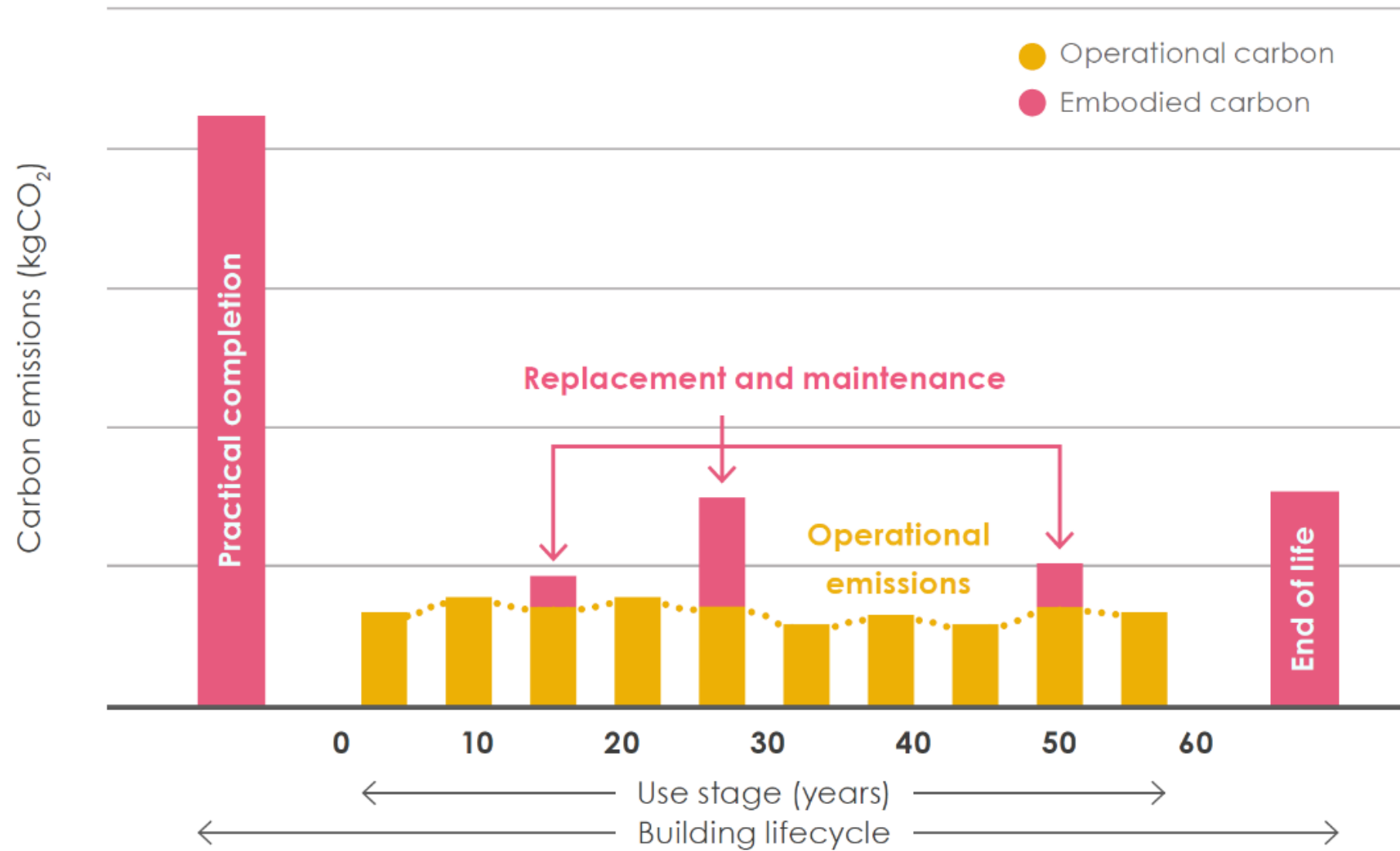


# NET ZERO CARBON means.....?



**Net zero operational balance**





**Figure iii** - Emission breakdown of a building's life cycle

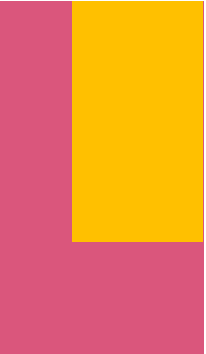
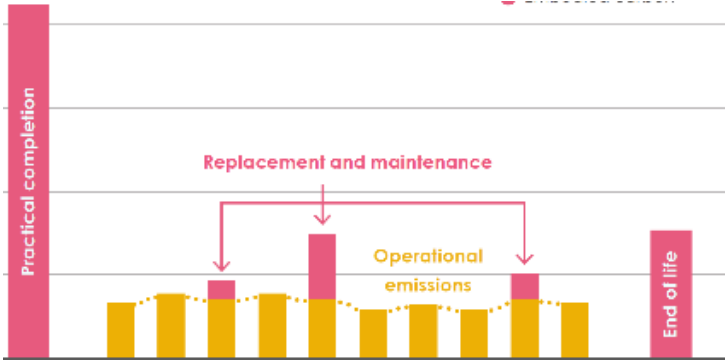
# NET ZERO OPERATIONAL CARBON means.....?



Operational lifecycle carbon emissions

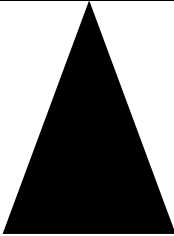
Renewable energy & offsets

# NET ZERO **WHOLE LIFE** CARBON means.....?



**Whole** lifecycle carbon emissions

Renewable energy & offsets



# 2025/ 2030 NoN goals...



2025 50%

50%

20%↓

2030 100%

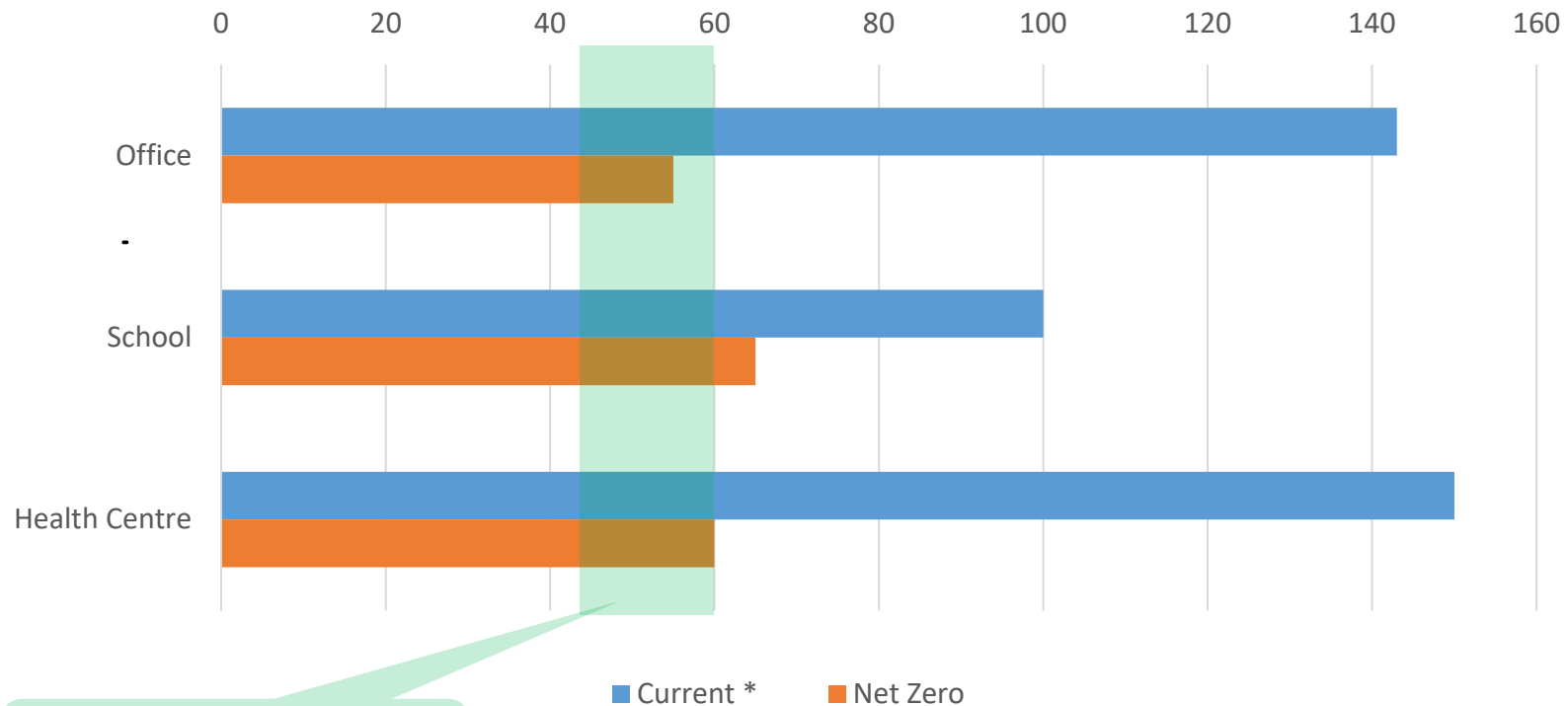
100%

55%↓



# Step 1 – Reduce energy use - how low do we need to go ?

Energy Use Intensity (EUI) – kWh/m<sup>2</sup>.yr



Passivhaus Standard

\* Typical UK sector benchmark for all ages/sizes – CIBSE TM46



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# Engage Supply Chain

**Bring suppliers on board early**

**Learn from earlier works**

**What else are they delivering**

**Create aligned outcomes**





# Passivhaus projects journey

2016



University of Leicester, George Davis Centre

2019



Harris Academy Sutton

2019



Hackbridge Primary School



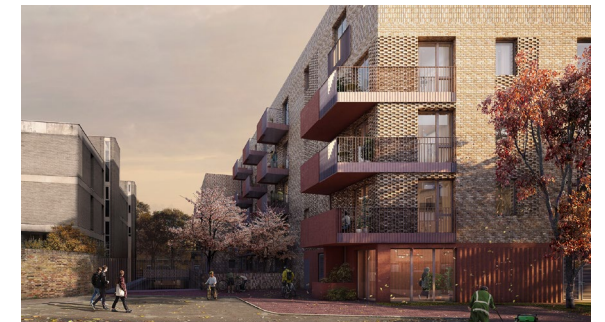
Spelthorne Leisure Centre



Caerphilly Council Homes



St. Peter's College, Oxford








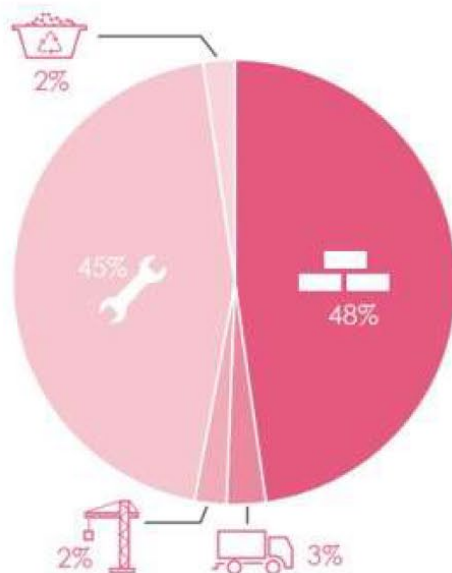
Westmead (bid)

## Our approach to tackling embodied carbon

Two areas of focus ....



-  Products/materials (A1-A3)
-  Transport (A4)
-  Construction (A5)
-  Maintenance and replacements (B1-B5)
-  End of life disposal (C1-C4)



Average split of embodied carbon per building element:

- **48%** - Superstructure
- 17%** - Substructure
- 16%** - Façade
- 15%** - MEP
- 4%** - Internal finishes

Reduce embodied carbon by 40% or to:

**<600**  
kgCO<sub>2</sub>/m<sup>2</sup>

Area in GIA

**Taking action to reduce it ....**

- Understand your project's carbon profile
- Identify the big tickets items
- Understand your options and increase transparency

# Embodied Carbon - Assessment & Reduction



**COLLIDA**  
A WILLMOTT DIXON COMPANY



## Sustainability at the heart of design

**Sustainable construction is one of our core values.** To support this, we have partnered with Architype, the UK leaders in net zero carbon and Passivhaus design, to ensure that our platform delivers housing fit for today and without impact on future generations.

**Our homes are net zero carbon in operation.**  
**Our homes contain lower embodied carbon.**  
**Our homes have lower running costs.**  
**Our homes benefit from full life cycle analysis.**

Click here to learn more about our **Now or Never** Strategy and how we plan to deliver Brilliant Buildings, Build Lives, and enable a Better Planet.



# Design for Monitoring

**Reduce the Energy Gap**

**Post Occupancy Evaluations need to be planned and contracted**

**Seasonal Commissioning is a must, not a nice to have**

**Use your data to learn and refine**

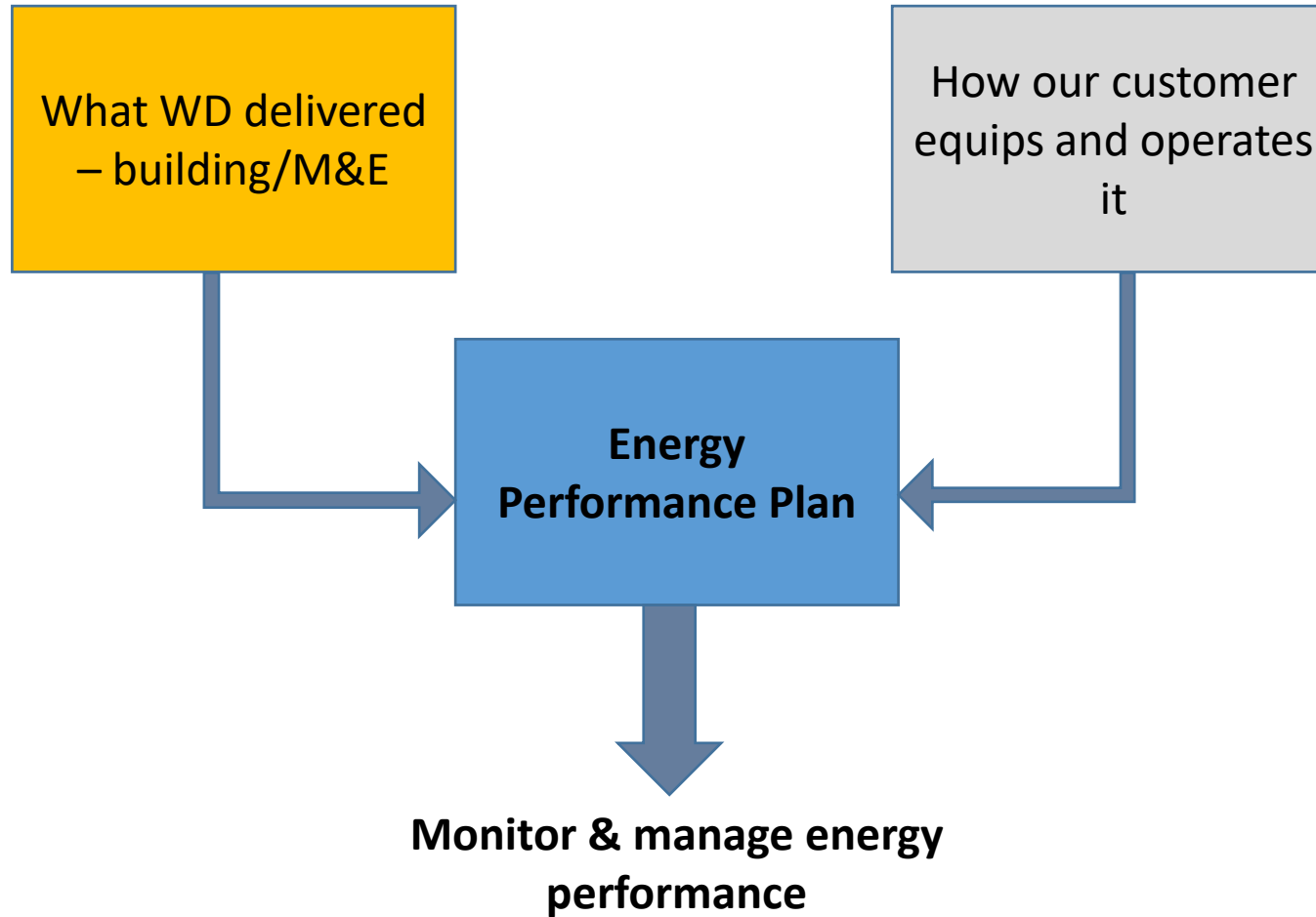
# Energy Synergy™

+ Warwick University Sports Hub



# Energy Synergy™

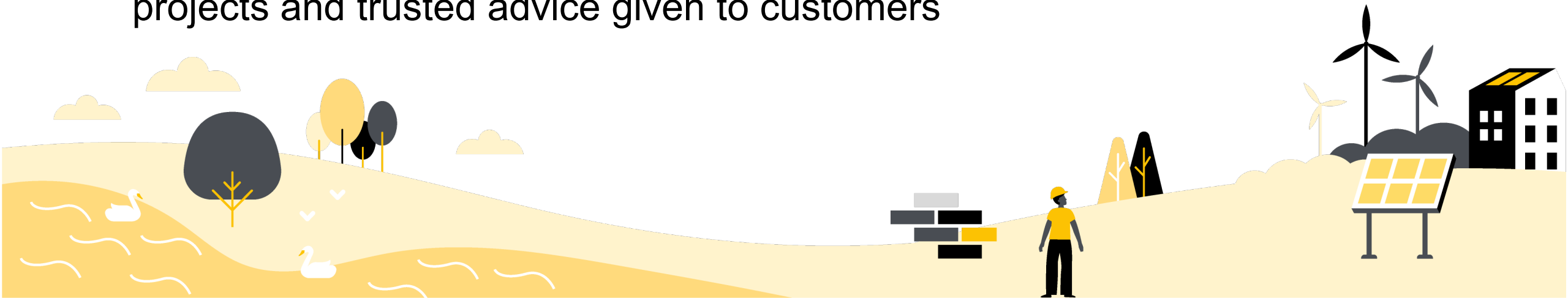
.....delivering better energy performance outcomes



**Improved outcomes for customers**

# Focus areas for 2022

- High quality net zero operational carbon design option reports on all new projects
- Secure our first community solar project contracts
- Robust and simple embodied carbon assessments completed on all new projects and trusted advice given to customers





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# Thank you

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