



# Low Carbon Trafford Park

## Executive Summary

27.02.2023

# Low Carbon Trafford Park – Key Drivers for Action

1

## Address Climate Change

- Trafford Council declared climate emergency in 2018
  - Trafford Park is a major energy consumer and emitter within Trafford Borough
- 

2

## Align with UK initiatives

- UK Net Zero 2050 – Build Back Greener
- 

3

## Align with regional initiatives

- Greater Manchester carbon neutrality goal by 2038
  - Net Zero North West
- 

4

## Create local value

- Attract businesses to the Park
- Foster the low carbon economy, creating local jobs in the short and long term
- Enable cost savings and new revenue for local businesses

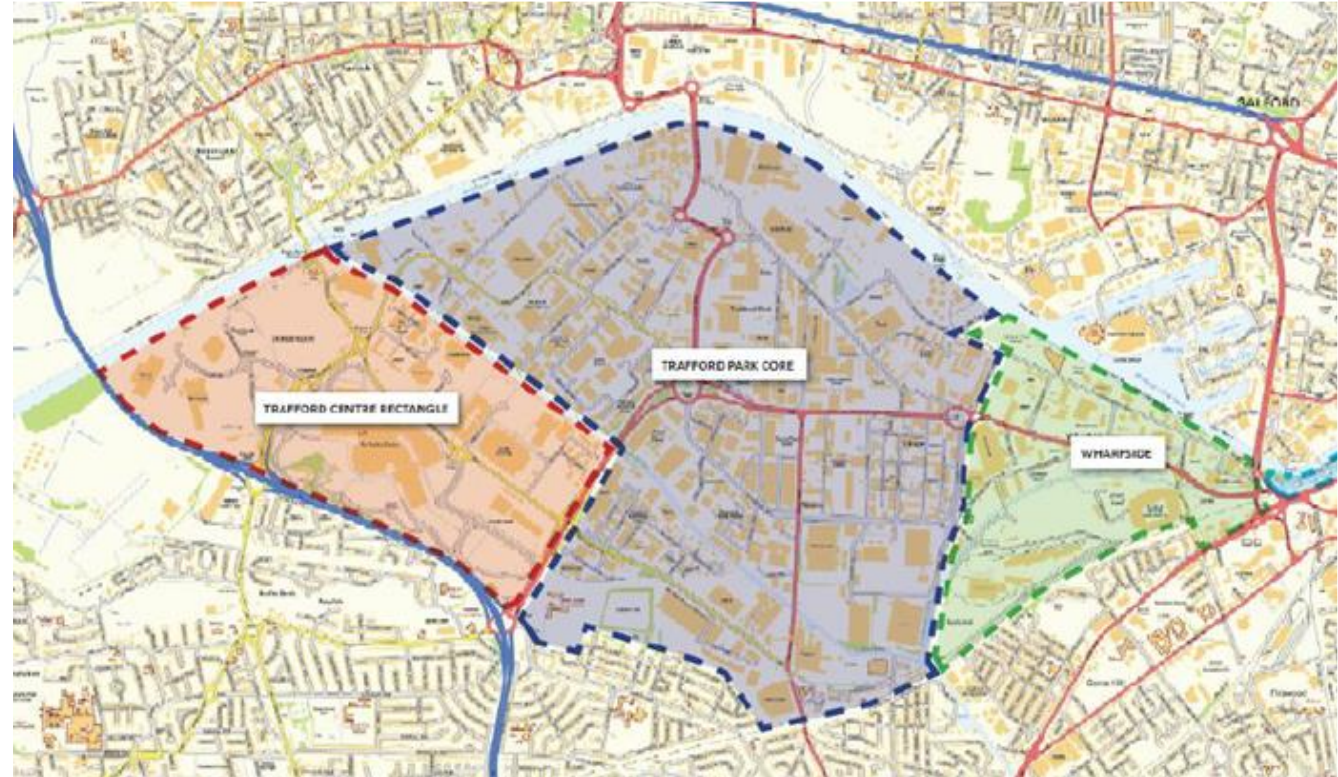
# Project Key Parameters

## Trafford Park Scope

- Park contains over 1,300 businesses, predominantly industrial, commercial, leisure and logistics
- Plans to achieve net zero by 2038 as part of Trafford Borough Council's Carbon Neutral Action Plan (2020) and Local Energy Action Plan (2022)
- Aligned Greater Manchester climate ambitions

## Roadmapping Process

- 1 **Benchmark** across sectors and load categories, and forecast business as usual consumption to 2038
- 2 **Calculate energy efficiency** against forecasted baseline
- 3 **Calculate alternative generation** and distribution measures possible across the park
- 4 **Outline implementation** timeline for all measures, estimated final impact, costs and benefits



Trafford Park is located to the south west of Greater Manchester and is a commercial and industrial hub for the region

# Our Approach to Developing a Decarbonisation Roadmap for Trafford Park

## Methodology of Low Carbon Trafford Park

### Baselining & Stakeholder Engagement

- Gather regional & local data
- Estimate total consumption & emissions within Trafford Park
- Establish “business as usual” baseline
- Conduct stakeholder and community engagement

### Energy Efficiency & Energy Technologies

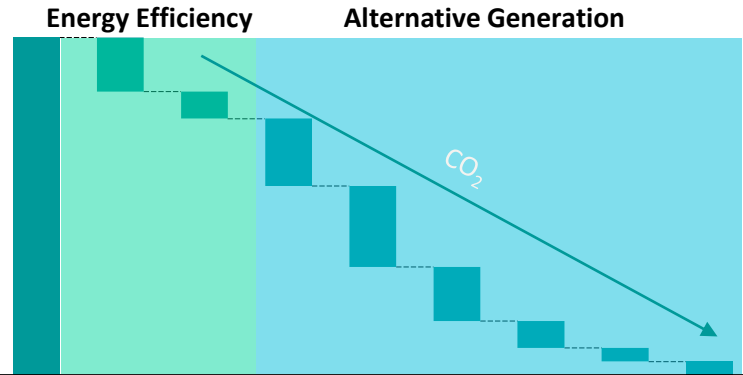
- Identify energy efficiency measures to lower electricity & heat demand
- Model alternative generation measures within Trafford Park to meet demand

### Implementation Roadmap

- Establish technical implementation timeline to meet 2038 low carbon goals
- Estimate impact, capex and returns for all measures
- Identify relevant stakeholders / roles for implementation, and funding opportunities

### Stakeholder Engagement

- Visioning workshops
  - 20<sup>th</sup> June 2022
  - 21<sup>st</sup> June 2022
- Individual engagement
  - May-June 2022

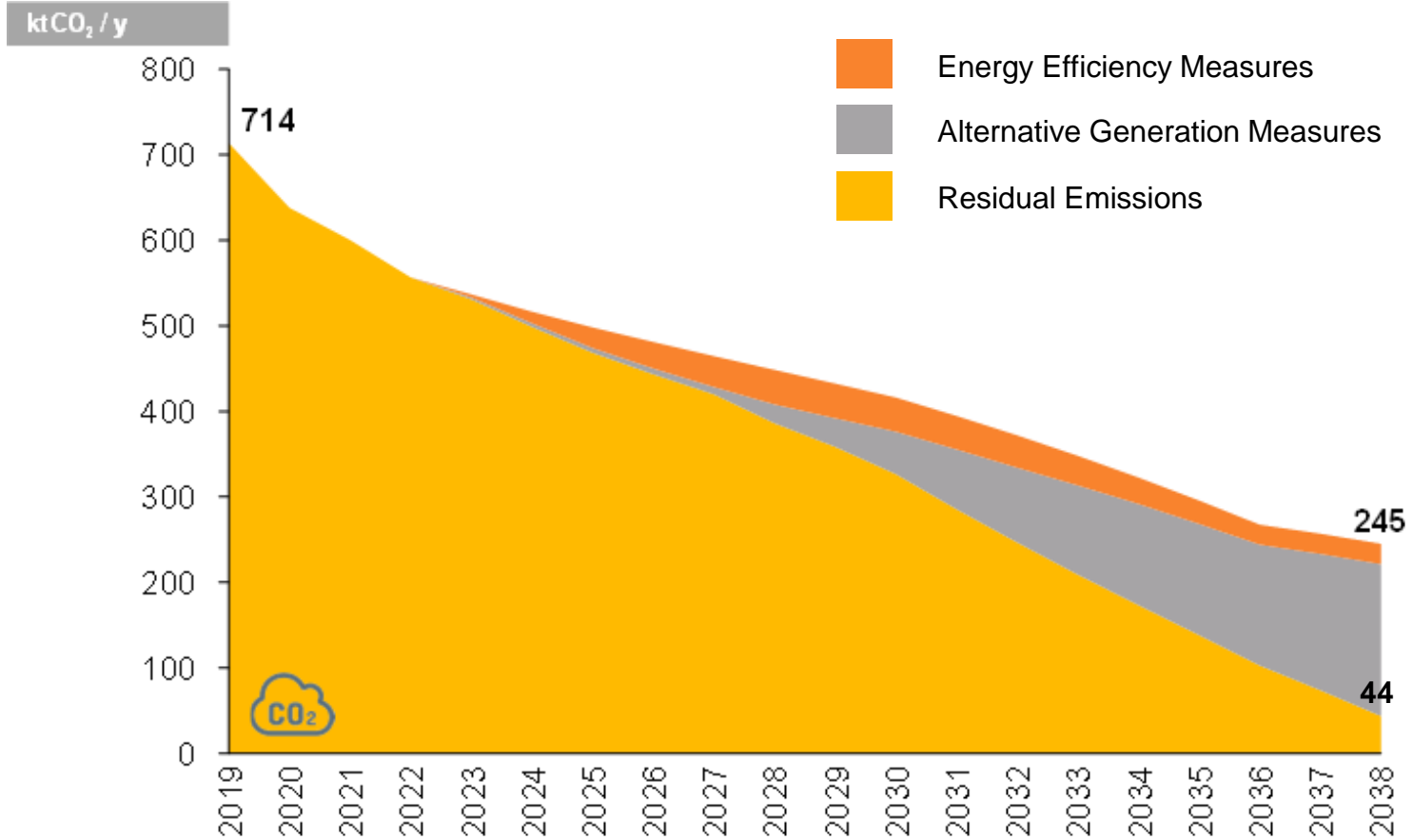
# Energy efficiency and alternative generation measures combined with grid decarbonisation and transportation electrification can reduce CO<sub>2</sub>e by 94% (2019 baseline)

## Category 1 Measures

- Electricity conservation
- Heat conservation

## Category 2 Measures\*

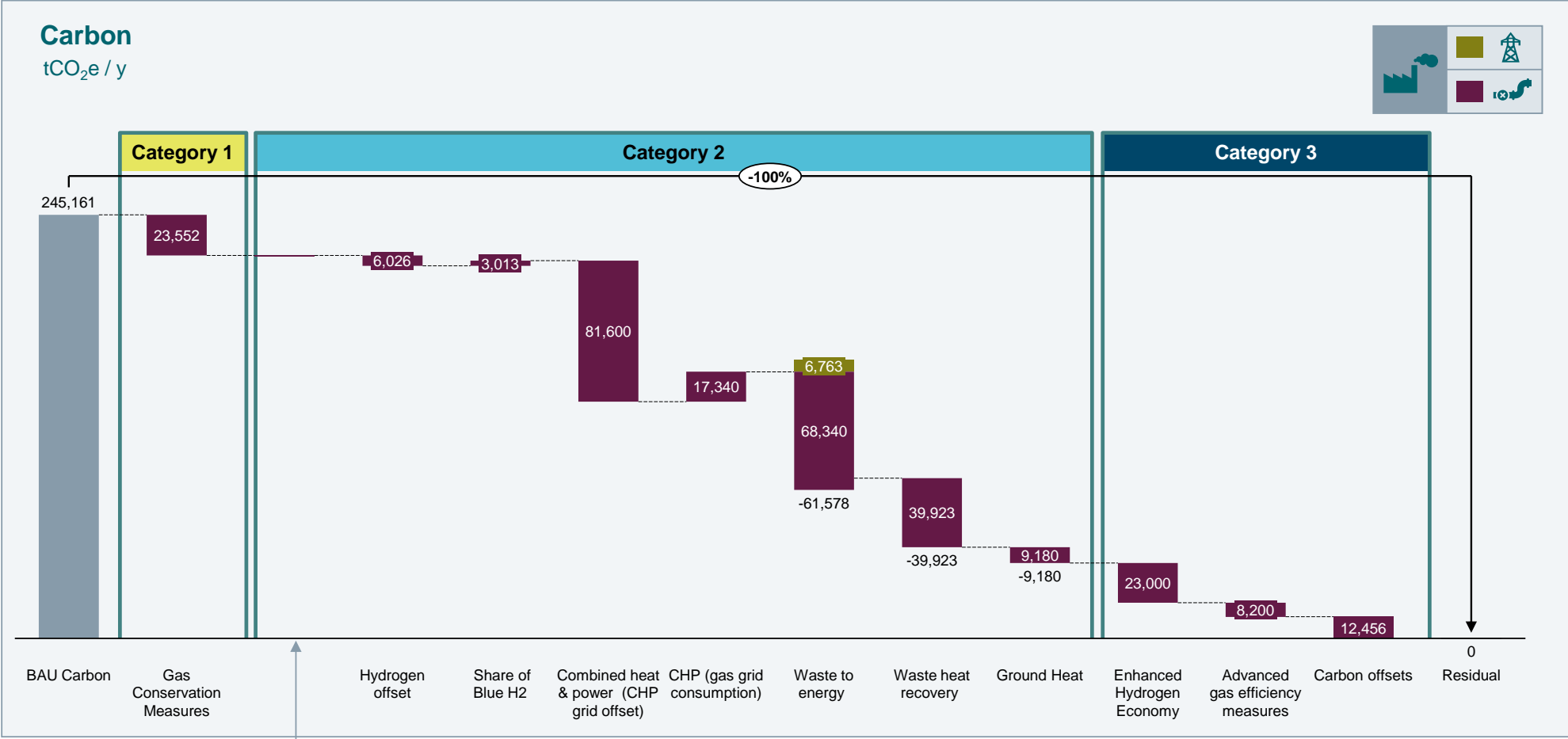
- Solar PV
- Wind
- Hydrogen
- Waste to Energy
- Combined Heat and Power
- Geothermal Heat
- Waste Heat Recovery



Trafford Borough Council's Decarbonisation Pathway 2022-2038

\*requires district heat network

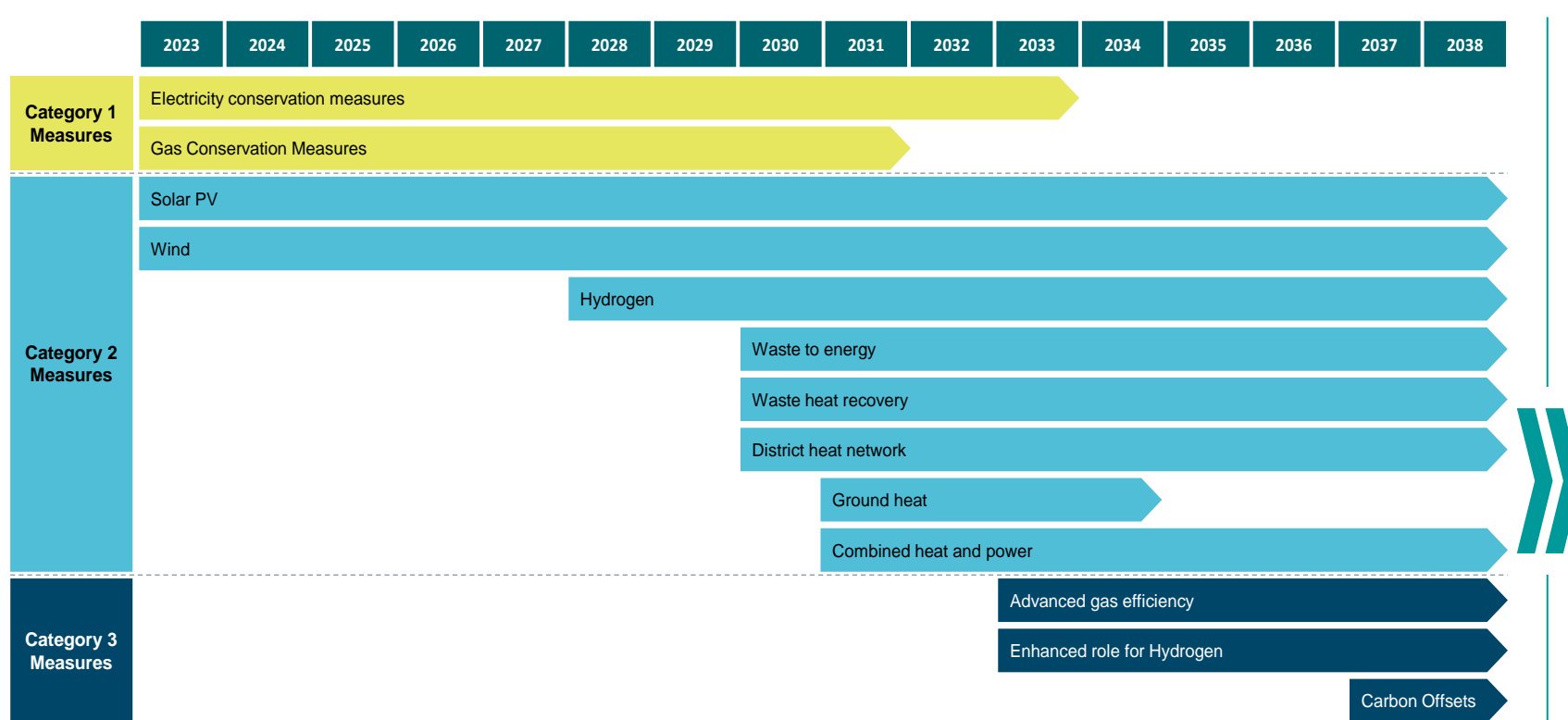
# After Category 1 & 2 measures, residual 2038 emissions may be offset, or enhanced measures may be deployed



By 2038 it is anticipated that UK's electric grid will have become fully zero-carbon leading to no marginal carbon reduction contributions from solar and wind.

*Impacts of All Low Carbon Measures on Trafford Park's Carbon Emissions Profile in Year 2038*

# Implementation will require both top down and multi-stakeholder approaches



*Prospective implementation timeline balances project lead time and effective year on year decarbonisation*

- 2023-2038**
- Up to **£1.2 billion** in potential investment within the Trafford Park boundary
  - Decarbonisation requires a **diverse mix** of technologies
  - Solution must be **combined with a district heat network** solution to succeed at scale
  - Implementation **requires individual stakeholders, Trafford Council, and supplier partners**

# Next Steps

## Stages to Achieve the Outcomes

1

**Stakeholder  
Engagement &  
Roles**

**Action:** Council to facilitate stakeholder workshopping and engagement  
**Outcome:** Achieve buy in from local businesses, aligning goals and delivery expectations, and off taking capacity

2

**Scope & Funding**

**Action:** Based on stakeholder input and buy in, confirm implementation scope of identified measures, and align funding sources  
**Outcome:** Confirm final scope of required infrastructure / measures and sources of capital for investments

3

**Rollout**

**Action:** Coordination of stakeholders and off takers from Stage 2 through installation / implementation  
**Outcome:** Implement measures to decarbonise Trafford Park by 2038

## Key Takeaways

- Measures will not be solely the responsibility of Trafford Council
- Local businesses and partners will play a key role in implementation
- A coordinated approach is required to meet milestones, with Council as facilitator





# Q & A Session



# Greening Trafford Park

February 2023



# Project overview

The project seeks to identify transport infrastructure and environmental improvements to support the Park becoming a thriving, resilient, green and sustainable destination for businesses.

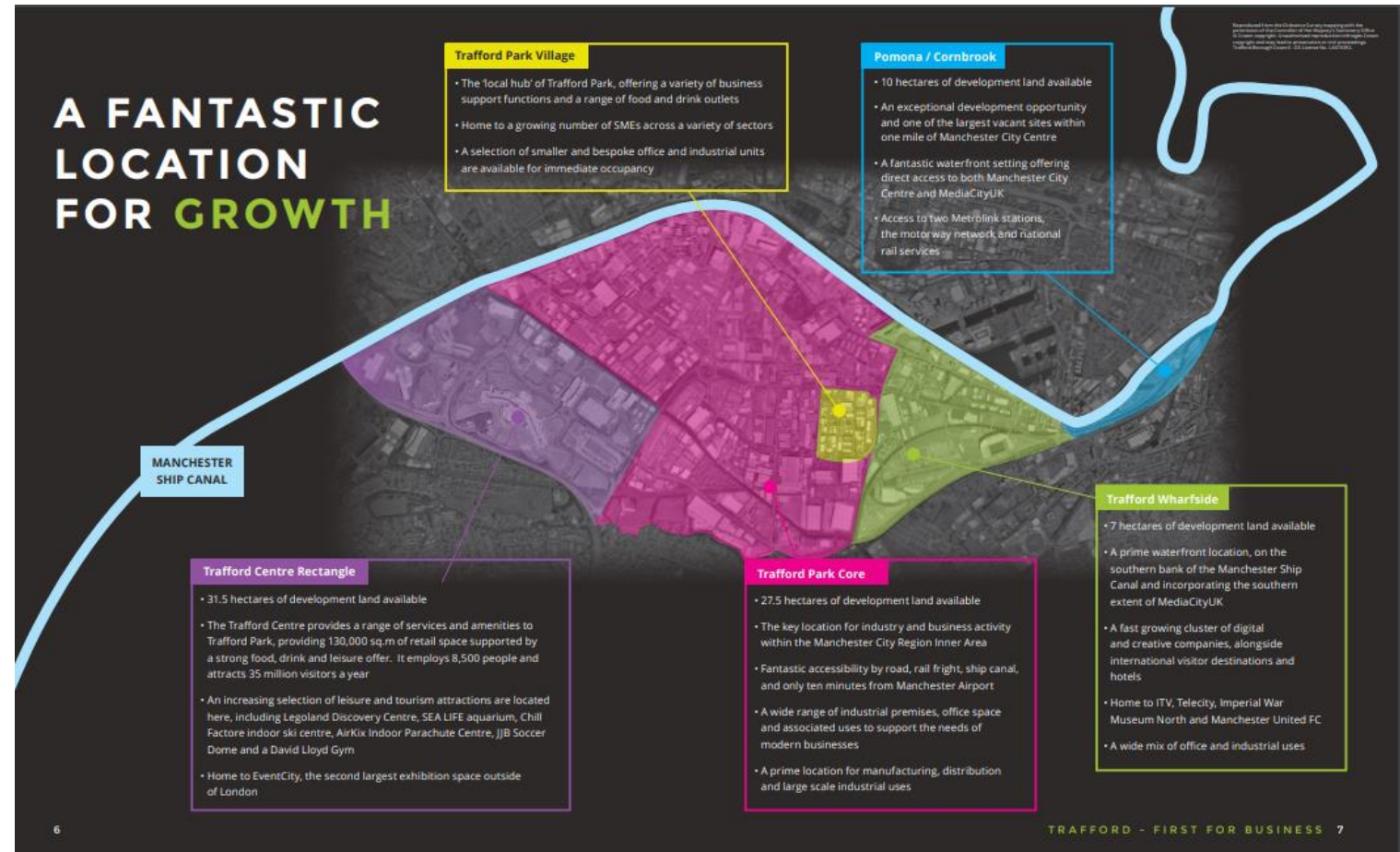
To support this vision, the project is seeking to:

- Improve the visual appearance and identity of the Park to attract green, sustainable and forward-thinking businesses
- Enable greater use of active and sustainable travel for Trafford Park businesses and employees
- Develop a range of green infrastructure measures to mitigate the adverse impacts of development and combat climate change
- Engage with businesses to explore issues and opportunities and potential funding options for transport and green infrastructure improvements
- Improve access to leisure opportunities and amenities within the park, such as the canals, parks and the Village



# Why Trafford Park?

- Largest opportunity within borough to have an impact at scale
- Large number of businesses /employers – opportunity for private sector investment
- Very low baseline in terms of sustainable transport and green infrastructure
- Protect and secure future of key employment site



# Study objectives



## Connecting people

Improving the pedestrian and cycle connections and public realm throughout the Park through the provision of green infrastructure and safe, attractive active travel routes. Delivering on opportunities to improve the identity and ‘feel’ of the Park, with particular focus on the Village as a local centre, to increase footfall and vibrancy in the area.



## Managing water

Identifying flooding and drainage issues will inform decision making on the type and location of proposed interventions. The current lack of porous surfaces, green space and presence of large building footprints must change in order to develop a sustainable water management system.



## Creating place

Locating key areas, such as the Village, and identifying opportunities for public realm improvements associated with blue-green infrastructure to promote a sense of place within Trafford Park. Maximising existing assets, such as the canals, Trafford Ecology Park and Lostock Park to encourage people to use and enjoy spaces within the Park.

# Identified Projects



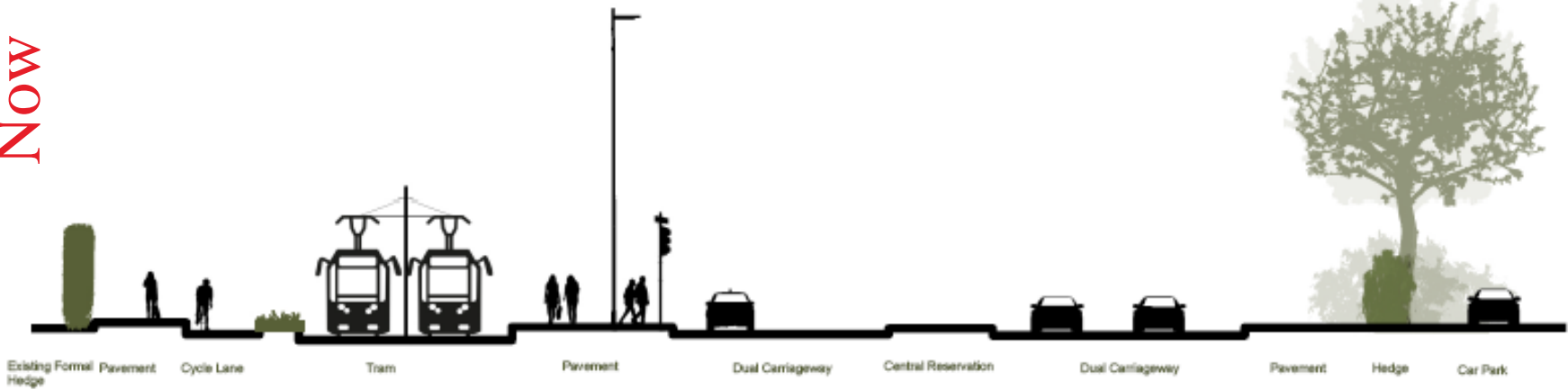
-  Bridgewater Canal opportunities
-  Enhanced waterfront opportunities
-  Gateways
-  Sustainable transport hubs
-  Sustainable transport routes
-  Green streets
-  Disused rail line opportunity
-  Metrolink line
-  Place based street



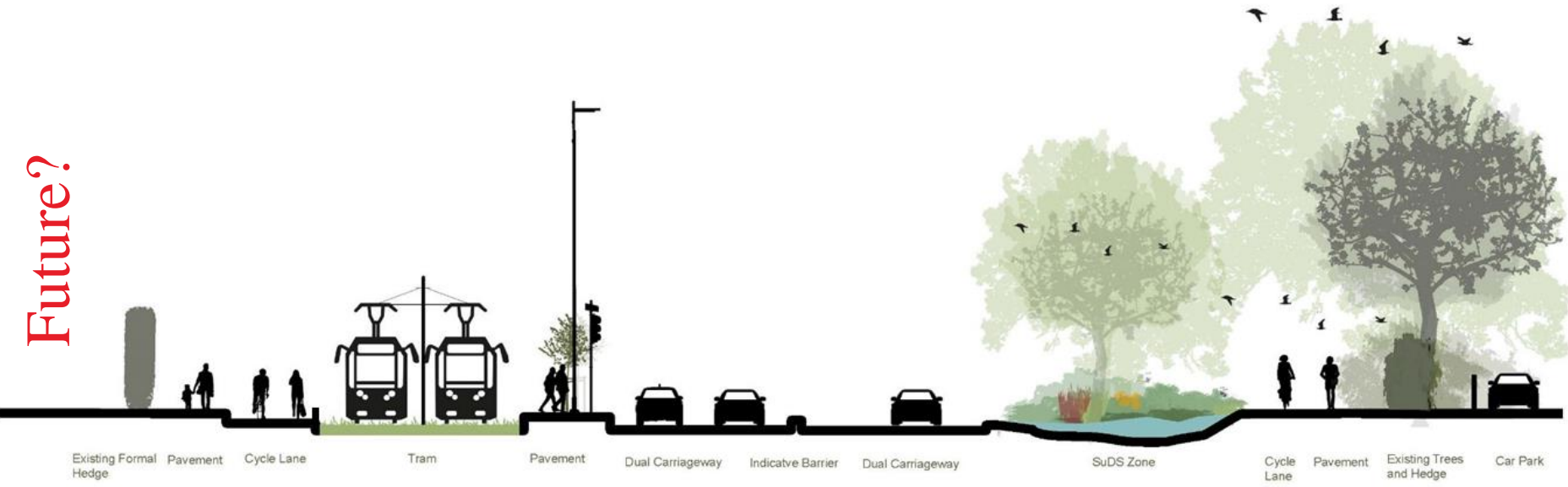
# Example Sustainable Transport Corridor (Village Way)



Now



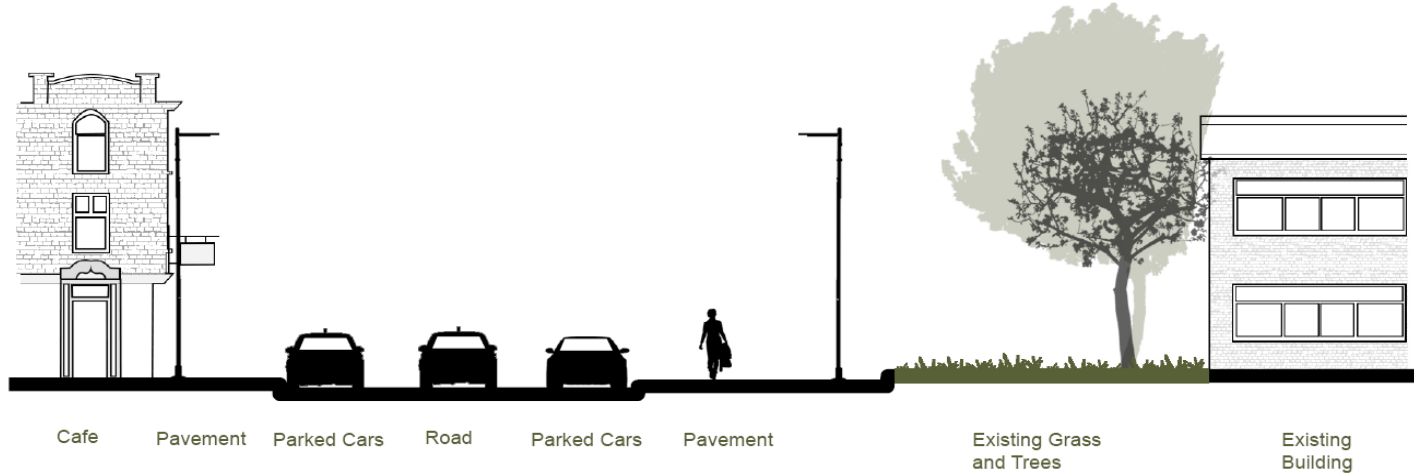
Future?



# Example Place Based Street (Third Avenue)



Now



Future?





# Delivery

- Approximately 20 projects identified
- Capital cost in order of £100-160m in total
- Large infrastructure likely to be public sector led – pipeline of future schemes over medium to long-term
- Potential for private sector investment through BID or other models

# Key Next Steps

- Identify and secure resource capacity to deliver scale of change required
- Scheme design and development
- Establish capacity for Trafford Park business led-transformation
- Develop planning policies and guidance to secure private investment and delivery of green infrastructure
- Partnership working with external organisations and community groups (including funding bids as appropriate)

ARUP