

Tyseley Energy Park

# Sustainability Vision, Policy and Strategy



Celebrating 300 years of Continuous Innovation



# Tyseley Energy Park

## Introduction

Tyseley Energy Park (TEP) is committed to the delivery of clean energy to Birmingham and the West Midlands via the stimulation of innovative energy solutions. Collaborating with the University of Birmingham and other pioneering affiliates, we seek to create an energy and waste nexus for the city of Birmingham, putting the site at the frontier of the green industrial revolution.

Tyseley Energy Park is enthusiastically committed to driving positive change through outstanding environmental, economic and social sustainable practice; in order to successfully align with

TEP's mission, a multi-step sustainable strategy must be implemented.

This Sustainability Policy and Strategy document details the ambitions, targets, key performance indicators and implementation methods associated with the identified focus areas and how they align with the United Nations 'Sustainable Development Goals'.

Our strategy is fluid and will evolve as new challenges and opportunities arise. Through development of additional documentation, we hope to map out our sustainable future and become a catalyst for others to follow suit.





# United Nations

## Sustainable Development Goals

The TEP sustainability vision seeks to contribute to tackling several of the United Nations 17 'Sustainable Development Goals' (SDGs). Using these goals ensures that the organisation is in a prime position to coordinate actions that work to support the global sustainability agenda.

TEP has identified SDG priorities that align sensibly with the overarching TEP vision. The prioritised SDGs are those that we believe TEP can make the most significant impact and will be used to focus sustainable activity. For each identified SDG, a principal strategic ambition has been defined to ensure the alignment of our strategy with the global agenda.



# United Nations

## Sustainable Development Goals



*'To remain committed to delivering affordable and more accessible low and zero carbon energy for a cleaner, healthier and greener Birmingham.'*



*'Through partnership with academia, industry and local community. We seek to promote a sense of identity for Tyseley as Birmingham's Green Innovation Quarter, reversing the region's spiral of decline whilst curating employment opportunities.'*



*'Encourage, facilitate and incubate green innovation to foster implementation of a decarbonised and universally accessible heating, power and urban transport system to ensure Birmingham is safer, more resilient and more sustainable.'*



*'Develop state of the art sustainable manufacturing operations in the Webster & Horsfall Group through the promotion of regional industrial symbiosis, the radical reduction in waste production and minimisation of virgin resource consumption.'*



*'To manage estate, manufacturing and tenant operations to minimise carbon emissions and contribution to climate change. We also aim to enable the site, tenants and wider community to cope with the impending impacts of climate change.'*

# Document Guide

Our sustainable vision has been intentionally split into several key areas of focus, listed below:

- Carbon and Energy Management
- Water Management
- Waste Management
- Travel and Mobility
- Sustainable Construction
- Ecology and Biodiversity
- Sustainable Procurement

This document serves as a framework that maps out the breadth of our strategic vision, and then with these seven areas identified, further policy and strategy will be developed to provide depth and detail in each area.

This overarching vision details the ambition of the organisation via sustainable targets and how these will be measured and achieved to contribute to our overarching sustainable development goals discussed previously. As strategy develops into the future, these key areas will be expanded upon with progress reports, more thorough implementation documentation and advanced strategy.

In relation to the identified 'Sustainable Development Goals', strategy that relates to the specific SDG will be coordinated with the relevant SDG icon. Note that the developed strategy may more closely align to SDGs that lie outside the primary scope discussed in the previous section,





# Carbon and Energy Management

## Overall Aim:

Net Zero Carbon Emissions by 2030.

## Interim Target:

*Adhere to a 10% reduction in carbon emissions per annum from our 2020 carbon (scope 1 and 2) audit baselines*

## Key Performance Indicators:

- Scope 1 Carbon Emissions (tonnes/y)
- Scope 2 Carbon Emissions (tonnes/y)
- Scope 3 Carbon Emissions (tonnes/y)
- Renewable energy contribution in annual electricity consumption across site (%)

## Implementation Measures:

- Attempt to increase capacity in power purchase agreement (PPA) from the Bio-mass plant and allow tenants to access this renewable generation.
- Retrofit of existing buildings to improve energy efficiency and reduce demand.
- Ensure audits of scopes 1 and 2 emission are conducted annually, either internally or externally.
- Ensure the bi-annual accounting of scope 3 emissions is conducted,
- Collaborate with the manufacturing supply chain to alleviate scope 3 emissions.
- Consistently investigate opportunity to increase renewable energy generation on site where possible.



# Water Management

## Overall Aim:

To preserve water via efficient and conservative consumption and management

## Interim Target:

*Commit to the reduction of mains water supply usage by 10% per annum*

## Key Performance Indicators:

- Annual total water consumption (m<sup>3</sup>)
- Annual total water consumption per employee (m<sup>3</sup>/FTE)

## Implementation Measures:

- Consistent analysis of monitored water metering data to help with the development of water reduction measures.
- Implement water efficiency improvements and projects on existing buildings.
- Implementation of rainwater harvesting technologies and circularisation of site wastewater to drive reductions in virgin water usage.



# Travel and Mobility

## Overall Aim:

To provide, incentivise and promote sustainable and feasible travel and mobility options for site employees.

## Interim Target:

*Have 75% of onsite staff commuting to and from work using sustainable modes of transport by 2025*

## Key Performance Indicators:

- Modal split for staff commuting (measured via TEP sustainability questionnaire)

## Implementation Measures:

- Annual TEP Sustainability Questionnaire conducted for data collection surrounding employee travel
- Delivery of mobility hubs at TEP and the wider area to promote sustainable mobility in the urban environment
- Push for improved 'last mile' interconnectivity between TEP and Tyseley station to promote rail travel.
- Increased utilisation of video-conferencing software (teams/zoom) to abate unnecessary travel for meetings.
- Provide innovative sustainable travel incentives. Methods currently in place include car sharing, car clubs, cycle to work schemes and electric vehicle salary sacrifice scheme.





# Waste Management

## Overall Aim:

To minimise and manage waste year on year through continuous improvement of circular practice and resource consciousness

## Interim Target:

*Reduce waste per full time employee (FTE) by 10% per annum*

## Key Performance Indicators:

- Waste produced per FTE (tonnes/FTE)
- Percentage composition of waste disposal. i.e. Percentage recycled/landfilled/incinerated etc.,

## Implementation Measures:

- Development and utilisation of Circular Economy Strategy Plan for TEP
- Investigation of unique recycling solutions of wire drawing soap for W&H group manufacturing operations with ARLI and ATETA
- Consistent analysis of waste data to identify waste solutions
- Dialogue with tenants (and outreach to businesses in the wider area) to formulate symbiotic waste utilisation.
- Partner in the West Midlands Industrial Symbiosis (WMIS) programme.
- No waste on site is sent to landfill.



# Sustainable Construction/refurbishment

## Overall Aim:

To ensure any new construction or refurbishment project has minimal environmental sustainability burden

## Interim Target:

*Ensure that all new builds/  
refurbishment projects on site yield  
an EPC rating of C or above*

## Key Performance Indicators:

- Percentage of new site buildings with a specific EPC rating (%)
- Percentage of all buildings with a specific EPC rating (%).

## Implementation Measures:

- Adopt a more calculated method to the use of site space (office spaces/shop floor) to ensure space is used efficiently and at maximum potential.
- Assess the operational (scope 1 and 2) and embodied (scope 3) carbon impacts of capital projects from the start of project conception.
- Investigation of unique recycling solutions of wire drawing soap for W&H group manufacturing operations with ARLI and ATETA
- Smart utilisation of heating and cooling to provide a comfortable working environment for staff and tenants whilst minimising carbon emissions through heating/cooling times (operational hours) and accounting for thermal comfort.

# Sustainable Procurement

## Overall Aim:

Improve the sustainability accreditation of the Webster and Horsfall supply chain by influencing both suppliers and consumers to partake in sustainable practice, boosting the sustainable integrity of the products we produce and consume

## Interim Target:

*Achieve level 3 'Practice' across every theme included in the sustainable flexible framework by 2025.*

## Key Performance Indicators:

- 'Level' achieved in the Sustainable Procurement Flexible Framework,

## Implementation Measures:

- Adhere to the Sustainable Procurement Flexible Framework and apply policies and recommendations to improve the supply chain.
- Currently moving towards the implementation of ISO14001 Environmental Management system to improve environmental credibility of manufacturing operations and assist in influencing the supply chain.
- Provide appropriate training, guidance and education to staff within procurement roles and those with purchasing responsibilities.

The framework referenced can be found here: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69471/pb13423-flexible-framework-guidance-110928.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69471/pb13423-flexible-framework-guidance-110928.pdf)



# Ecology and Biodiversity

## Overall Aim:

Contribute positively to the preservation and improvement of local ecology and biodiversity in the area, ensuring new construction, maintenance and refurbishment projects do not harm the natural environment.

## Interim Target:

*Ensure that all new construction projects on site have a 10% net-gain in biodiversity*

*Consistently work to improve biodiversity and ecology where possible*

## Key Performance Indicators:

- Biodiversity net gain (%) as measured by ecological surveillance

## Implementation Measures:

- Partner in the River Cole Regeneration project, working with the local community, City Council and the University of Birmingham to regenerate green space around the River Cole to promote ecological growth and community outreach.
- Further regeneration of natural environments around site, including the area surrounding the St. Cyprians Church which will be developed into an outdoor leisure space for employees. A beehive has also been installed to promote pollination and improve biodiversity.
- Seek win-win scenarios where biodiversity net-gains can be achieved through carbon offsetting (tree planting/wetland creation)
- Previous ecological surveys provided recommendations of curating specific bird boxes through waste wood on site to preserve and protect native bird species.
- Extremely difficult to abate carbon emissions could be offset. Carbon from business flights could also be offset.





# Social and Economic Sustainability

## Overall Aim:

Become a catalyst for change in the region by promoting local employment and investment. Continuously work with academic and industrial partners to identify methods to reverse economic and social decline

## Interim Target:

*Provide a positive contribution to local annual economic growth per capita whilst improving the quality of life for local residents.*

*Bring continuous investment opportunities into the site (£100m investment currently)*

*By 2030, bring in at least 200 new job opportunities on site through new projects*

## Key Performance Indicators:

- Number of employees across the site.
- Total investment sum into site from 2022 onwards (£)
- Total investment sum into wider Tyseley area from 2022 onwards (£)
- Number of public outreach events exhibited
- Regional unemployment rate (%) (45% in 2022)

## Implementation Measures:

- Member of the TEED (Tyseley Environmental Enterprise District) partnership, which builds upon the Birmingham Inclusive Growth Strategy to define a clear identity for the area as a green innovation quarter, driving economic growth for local businesses and employment opportunities for residents.
- Regular attendance at community events and outreach opportunities
- River Cole Regeneration project (as discussed in Ecology and Biodiversity Section)
- Regular attendance at business engagement events
- Work with local schools to engage with the next generation on global climate issues and spark their curiosity.

# Monitoring and Progress Review

The monitoring and review of sustainable progression will be conducted regularly to ensure that ambition is being met and the organisation is performing optimally from a sustainability perspective. It is important to note that sustainability strategy is fluid in nature, therefore, this document will be updated in the future where necessary to consider novel challenges and emerging opportunities.

Monitoring and reporting will be conducted in the following ways:

- Bi-annual internal reporting of key performance indicators for each focus area to be established and presented to the board and partners
- An annual 'Sustainability Report' will be created and published publicly to create transparency between TEP and the community about our sustainably progress.

## Summary

Sustainability in all its forms shapes the ethos of Tyseley Energy Park. The implementation of effective strategy therefore is of key consideration for the overarching performance of the whole organisation. This document is intended to set the foundation for the site's sustainable journey to allow for calculated and targeted decision making at all levels of the organisation.

