

The Lowry Sustainability Strategy

Executive Summary

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1. The Lowry and Sustainability

1.1. Introduction

The Lowry is an art centre complex at Salford Quays. It is named after the early 20th-century painter L. S. Lowry, known for his paintings of industrial scenes in North-West England. The complex opened on 28 April 2000 and was officially opened on 12 October 2000 by Queen Elizabeth II. It was a front runner in the redevelopment of the Salford Quays redevelopment and remains a hugely popular and important cultural venue for the Northwest and UK.

Sustainability is already a key driver for The Lowry with the following activities examples of work, change and investment already carried out:

- internal Environmental and Sustainability Team (EAST) launched across the organisation
- achieved DEC 'C' rating for the first time
- significant investment in LED energy efficient lighting across the building
- investment in energy efficient plant
- removal of all single use plastics bottles across our public catering operation

In addition to this, the following activities are due to be completed in 22/23:

- Julie's Bicycle Creative Green 3 star in 22/23, with 5 star within 2 years after that
- 25% of staff Carbon Literacy trained in 22/23, with 100% completion within 2 years after that
- organisation-wide environmental sustainability 'code of practice'
- communications strategy (internal & external)
- transport strategy (internal & external)
- appointment of a lead Trustee for environmental sustainability

Buro Happold have been commissioned to develop a sustainability strategy for The Lowry to ensure activities and investment going forward will meet the sustainability aims of the organisation. In order to shape this work, the Theatre Green Book will be utilised which has been produced by Buro Happold as a framework to allow theatres to better plan their sustainability strategies.

1.2. Why the Green Book?

The Theatre Green Book gives cultural venues a path towards sustainability. It builds on years of work by theatre-makers and sustainability pioneers like Julie's Bicycle, Creative Carbon Scotland, SiPA, Ecostage and others. It maps the journey towards an industry that is low carbon and low waste, values people, and contributes to a more sustainable society.

The climate crisis is an immediate threat to our safety, equity and prosperity. We urgently need to limit carbon emissions, reduce biodiversity damage, and, in doing so, achieve a just transition where people, places and communities are supported and vulnerable groups protected. Theatre cannot solve the climate crisis alone, but it can play an urgent role in addressing it. Theatre can question and challenge, provoke, entertain and surprise. It can reflect the preoccupations of generations facing a time of dizzying, frightening change.

But to do that, theatre itself needs to work sustainably.

1.3. Structure of the Sustainability Strategy

The proposed sustainability strategy for The Lowry will be set out in 4 key reports:

- **Executive Summary** (this report) - An overarching document to set out the high level sustainability strategy for The Lowry.
- **Sustainable Productions** – Detailed plan showing how to reduce the impact of productions including travel, waste and materials. The outcome will be the result of engagement with key members of the productions team.
- **Sustainable Buildings** - Detailed plan showing how to reduce the environmental impact of the building. The outcome will be the result of a building survey and analysis of the energy consumption data in order to propose a suite of interventions towards energy reduction and decarbonisation.
- **Sustainable Operations** - Detailed plan showing how to reduce the impact of operations The outcome will be the result of engagement with key members of the operations team.

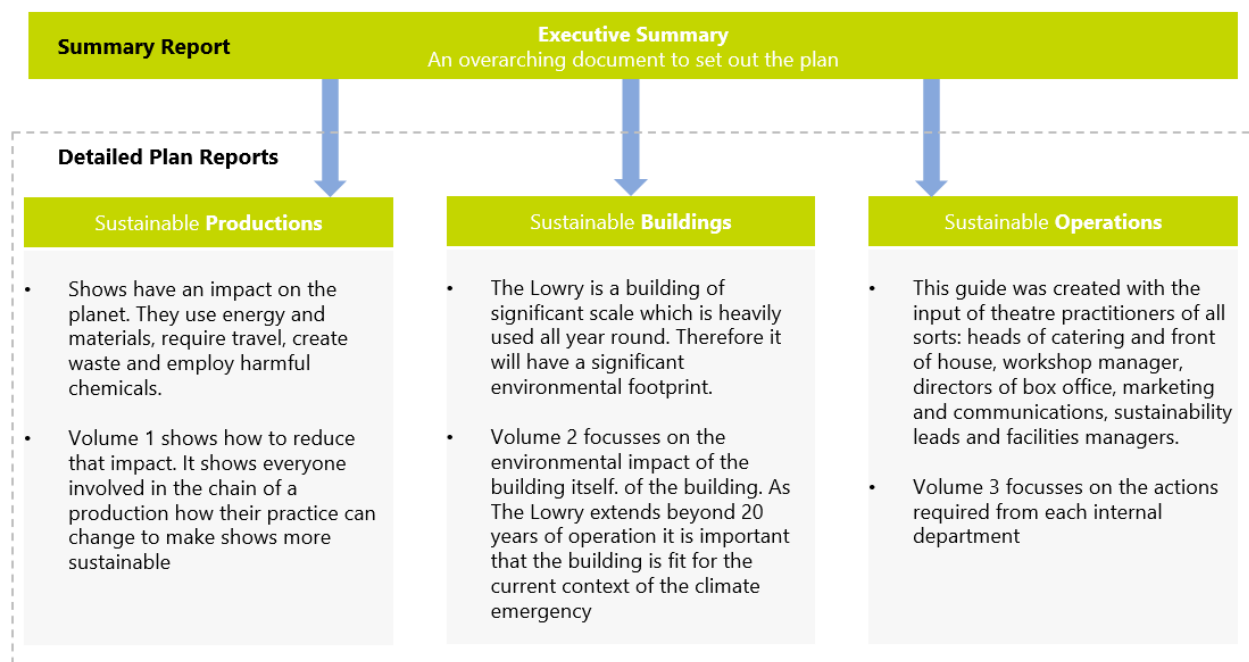


Figure 1-1 – Sustainability strategy outputs

1.4. Purpose of this Report

This purpose of this Executive Summary is to provide an overarching document to set out the high level sustainability strategy for The Lowry and the key components and targets. It is framed around, and responds directly to, the 3 themes set out in the Arts Council “Essential Read” document on Environmental Responsibility.

Table 1-1 - Arts Council Environmental Responsibility themes

Arts Council Theme		Arts Council Ambition	“What this means for you”
1	Understanding the data	<i>We want the sector to be an exemplar at the collection, reporting and understanding of its environmental data. This data should clearly inform environmental planning and initiatives and will play a demonstrable role in decision and policy making.</i>	<i>You collect and use good quality data to inform your environmental strategies and initiatives, including your action plan and policy.</i>
2	Plan, action and change	<i>We want the organisations and individuals we support to forefront their commitment to environmental responsibility through considered planning and actions. We expect this to result in continued carbon reductions and to also highlight the potential of culture to connect, mobilise and inspire places and communities, and champion cultural leadership.</i>	<i>Your environmental strategy needs to be a core part of your planning. It should be supported by relevant actions and targets that reflect a commitment to environmental responsibility and where relevant net zero carbon pathways. You should strive to demonstrate positive change via the actions and initiatives in your strategy.</i>
3	Influence, educate and advocate	<i>We want the organisations and individuals we support to lead by example, promoting the need for environmental responsibility in the communities in which they work, within partnerships and with audiences and stakeholders. There will be an increased awareness of the cultural sector’s role in catalysing change, demonstrating how culture can influence and inspire action locally, nationally and internationally.</i>	<i>Many practitioners and organisations across the sector have pioneered good environmental practice and developed invaluable knowledge. By sharing your data, plans, experiences and outcomes with your team, partners, stakeholders and the public you demonstrate your commitment to our environment.</i>

2. Understanding the Data

2.1. Strategic Aims

It's important to know how the building is performing now. That gives a baseline. As improvements are made, progress can be mapped against this baseline, tracking progress towards zero carbon.

Measuring how the building operates allows one to:

- Compare performance against similar buildings
- Identify areas to focus on (helping refine a Sustainability Plan)
- Set targets

The key data to be collected, and key outputs from that data, are set out in the following table. Note further data streams relating to productions and operations may be defined following proposed workshopping of these aspects.

Table 2-1 - Data collection strategy

Data to be collected	Purpose	Output
Benchmark data for gas, electrical and water consumption	Establish an industry benchmark for energy consumption against which to compare	Pathway to net zero operational carbon by 2038
Actual gas consumption	Measure the current energy consumption of the building to use as a baseline energy consumption and carbon emission	
Actual electricity consumption		
Water consumption	Measure the current water consumption of the building to use as a baseline consumption	Reduction of mains water consumption vs. baseline (target TBC)
Building controls assessment	To identify energy savings which could be made through controls improvements	Energy saving contribution towards net zero pathway
Building condition survey	To establish potential energy savings	List of potential improvements
Downstream waste tracking	Ensure waste disposal is monitored	Targets of % recycled and zero to landfill (target TBC)
Upstream supply chain tracking	Monitoring of supply chain purchases and production material to establish potential environmental improvements	Material inventory established
Staff and visitor travel	To establish how staff and visitors travel to the venue	Targets for improvement

2.2. Energy Benchmarking

In order to develop a decarbonisation strategy for any building, it is first important to compare the energy use of the building with those which serve the same or similar purpose. By benchmarking the theatre’s energy usage against both other theatres as well as best practice industry benchmarks, progress towards zero carbon can be easily tracked.

Work has also been carried out to assess the energy consumption of the building and compare it to industry standards. This is the first step towards monitoring and reducing energy consumption, and thus carbon emissions, of the building. The results of this study are set within this chapter.

An initial survey of the building has been carried out in order to assess the key energy and carbon savings opportunities. A thermographic survey has also been carried out to assess the heat loss through know key weak spots in the building fabric. The results of this work will be set out in the “Sustainable Buildings” report.

Industry benchmark comparison

The availability of benchmark data for theatres is quite limited as each facility and the activities that take place there are often quite bespoke, so it makes comparisons between facilities or benchmarks more nuanced. However, CIBSE have written a paper in collaboration with Julie’s Bicycle and Oxford University’s Environmental Change Institute, **‘Benchmarking Energy Use in Performing Arts Buildings’**, which contains a new building energy data set created from more than 100 performing arts buildings. The dataset has been used to test the robustness of CIBSE’s TM46 entertainment hall benchmark, which is the closest building type category for performing arts buildings. The chart below shows the Baseline energy and carbon intensities for The Lowry in comparison to the CIBSE benchmark.

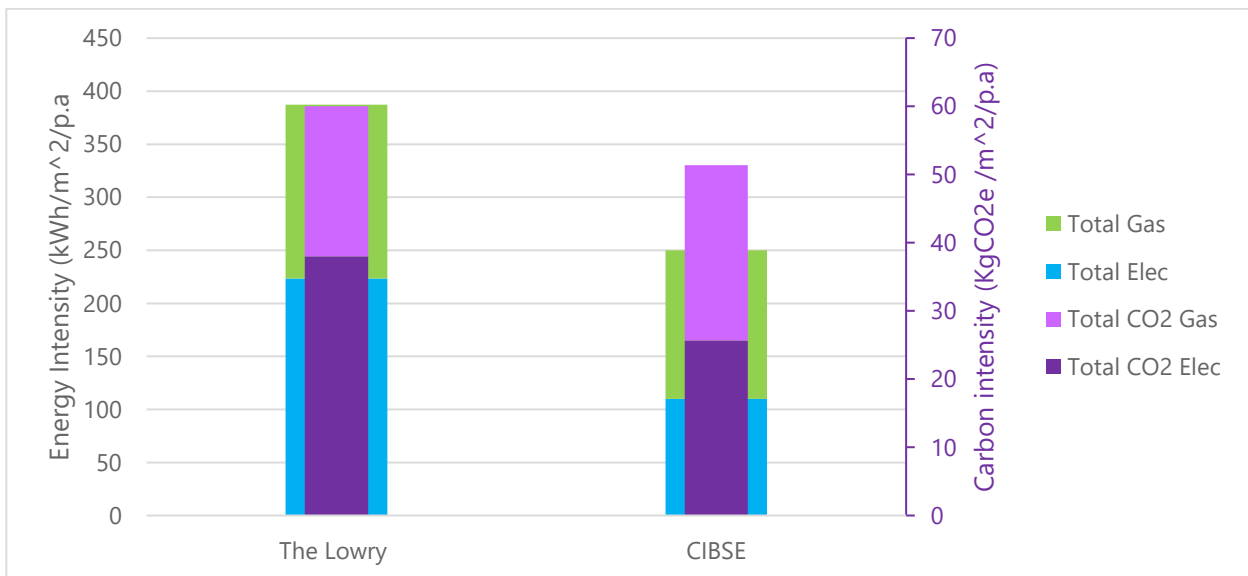


Figure 2-1 - The Lowry energy performance vs. CIBSE Performing Arts Buildings benchmark

It can be seen that The Lowry is using not much more gas than the CIBSE benchmark, however, it is using double the electricity.

Comparison with similar cultural buildings

Overall, the most pressing concern lies with the abnormality in electricity usage. One reason for the discrepancy in electricity usage between benchmarks could be that The Lowry houses a huge variety of spaces serving different functions (including environmentally controlled gallery spaces), whereas some of the theatres used to create the industry benchmarks, and in the DEC study do not have as diverse usage of space.

In order to judge this, the DEC study was broken down into Theatres which come under the same ‘benchmarking’ category as The Lowry (**‘cultural’**), and which were found to house similar spaces, such as an art gallery.

The chart below shows the energy comparison between The Lowry, The Barbican and The Waterman.

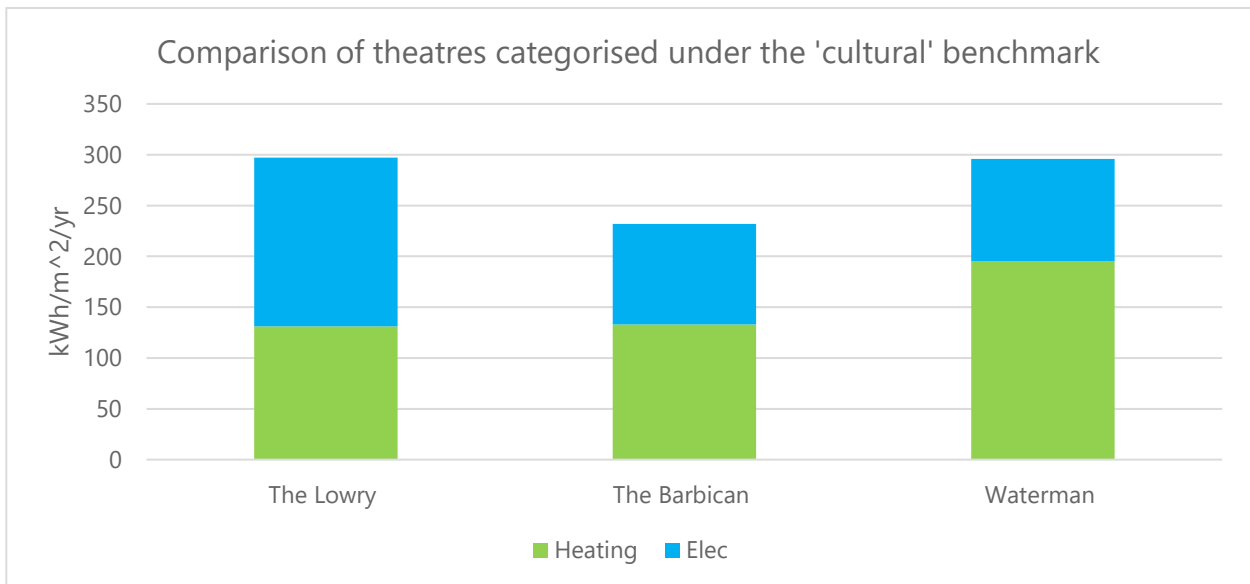


Figure 2-2 - The Lowry DEC comparison vs. multi-use cultural venues

From this comparison, The Lowry is still shown to be using almost double the electricity as those theatres of similar space usage. In order to better understand the reason for this unexpectedly high consumption, **sub-metering should be installed** so that electricity consumption can be broken down into main categories, where the largest usages of electricity can easily be identified.

2.3. Data Collection – Next Steps

Proposed next steps regards data collection and proposed timeframes are as follows:

Table 2-2 - Data collection - next steps and timeframe

Data to be collected	Next Steps	Timeframe
Benchmark data for gas, electrical and water consumption	A benchmark has been established, against which a decarbonisation pathway should be produced.	Decarbonisation pathway to be developed by mid-2023
Actual gas consumption		
Actual electricity consumption		
Building condition survey	A survey of the building has been carried out, with list of proposed energy saving measures. These should be assessed and planned out.	
Water consumption	Existing water use benchmark to be established, and appropriate % saving target to be established.	Water saving target established 2022
Building controls assessment	A diagnostic study of current building surveys should be carried out, with resultant energy saving options.	Diagnostics study to be carried out 2022, with programme of proposed improvements
Downstream waste tracking	Develop waste tracking metrics and establish waste reduction and % recycled targets	Waste generation and recycling targets established 2022
Upstream supply chain tracking	Inventory established to establish a baseline for purchased materials	Supply chain impact reduction target established 2023
Staff and visitor travel	Produce a survey to establish how staff and visitors travel to the venue	Produce surveys 2022

3. Plan, Action and Change

3.1. Strategic Aims

The Lowry is committed to embedding sustainability through all its activities. This requires planning, leadership and creation of a positive and collaborative culture. The Lowry is in a good position, with an environmental strategy and sustainability team already setup within the organisation.

3.2. Sustainability Action Plan

From this document, a sustainability action plan will be drawn up by The Lowry, clearly setting out:

- Strategic vision
- Measured sustainability metrics and targets
- Sustainability reporting strategy
- The role of the sustainability champion/leader in directing and inspiring the sustainability team as well as allocating and managing funds, and appointment of a lead Trustee for environmental responsibility.
- Roles of the existing EAST team towards actioning change within the following themes:
 - Decarbonisation
 - Waste
 - Water
 - Education and advocacy
 - Transport and behaviour change
 - Communication and marketing
 - Code of practice
 - Training
- Distinct activities and desired outcomes for each of the above themes.
- Aspirational timescales for achieving desired outcomes.

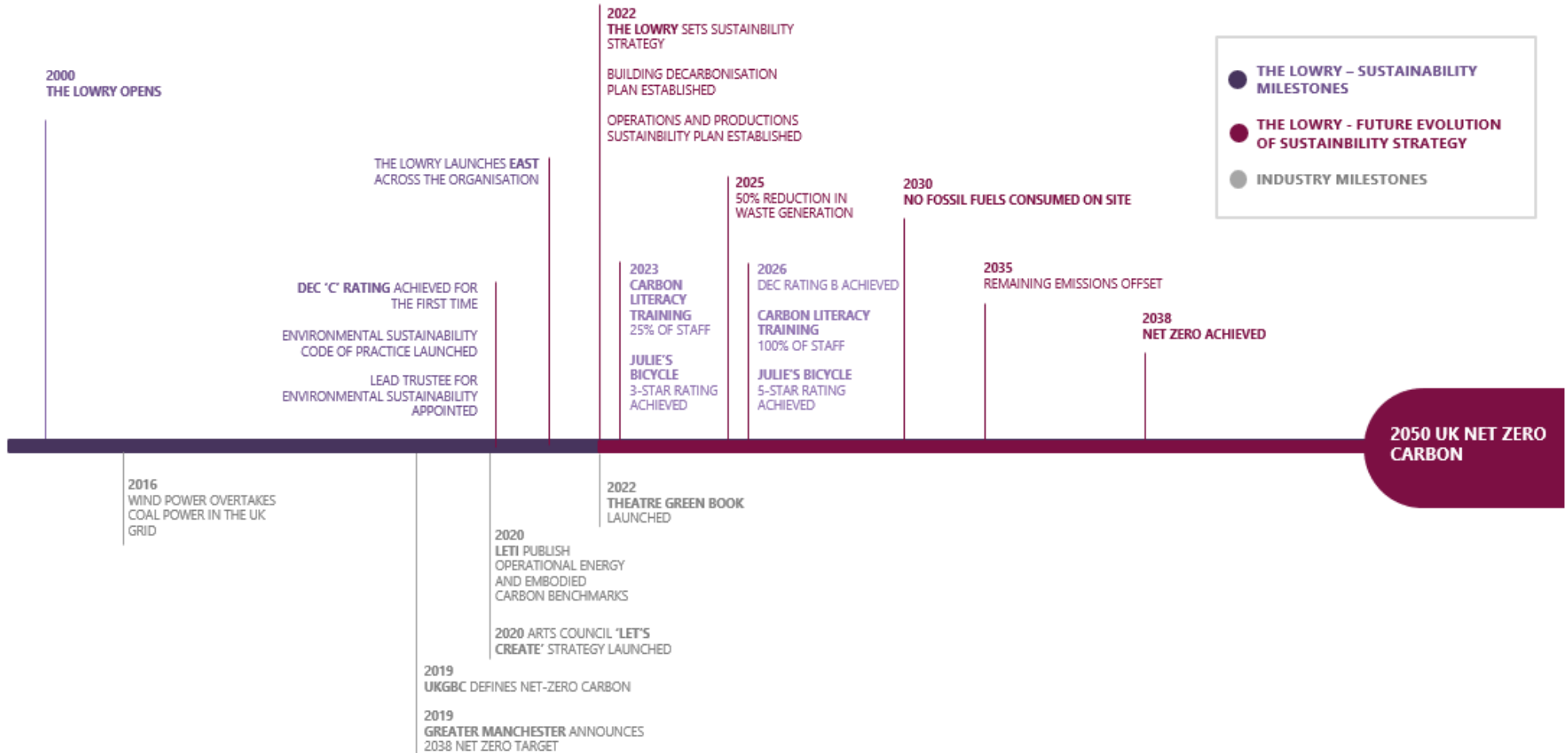
3.3. The Theatre Green Book

The Theatre Green Book will be utilised as a guide to ensure all relevant parts of the organisation are engaged and buy-in to the strategy and action plan. As a minimum, the Lowry will work towards the minimum baseline standard set out in the guidance. The key next steps to establishing this baseline are:

- Volume 1 – Productions
A workshop with the relevant internal staff members will be setup to establish how the baseline standard can be carried out, and establish opportunities for achieving intermediate and advanced standards.
- Volume 2 – Buildings
A building survey has been carried out and a shopping list of interventions proposed. The list will be assessed and interventions programmed out to align with the net zero carbon target. The interventions must also be costed and a budget allocated to ensure feasibility of the programme.
- Volume 3 - Operations
A workshop with the relevant internal staff members will be setup to establish how the baseline standard can be carried out, and establish opportunities for achieving intermediate and advanced standards.

3.4. Sustainability Strategy Timeline

The following diagram sets out the sustainability timeline for The Lowry, from opening out to net zero carbon target year.



4. Influence, Educate and Advocate

4.1. Strategic Aims

It is imperative that a positive and enabling culture towards sustainability is nurtured. This requires enthusiasm, organisation and careful planning of targets, but also the communication and presentation of ambitions and achievements to a wider audience, both internally and externally to the organisation.

4.2. A Culture of Change

In order to engender a sustainable culture across the organisation The Lowry will:

- Internally launch the sustainability strategy and action plan
- Periodic sustainability reporting issued across the organisation, communicating progress against KPIs as well as future aspirations or projects
- Workshopping the Sustainable Productions volume of the Theatre Green Book with relevant internal stakeholders
- Workshopping the Sustainable Operations volume of the Theatre Green Book with relevant internal stakeholders
- Further carbon and sustainability literacy training for staff

The Lowry will also leverage its position as a hub for local and wider cultural communities to spread sustainability to a wider audience by:

- Making the sustainability journey of the Lowry externally visible through it's website, social media and within the Theatre.
- Working with industry, utilising tools and guidance such as the Theatre Green Book and Julie's Bicycle.
- Partnering with ethical and sustainable companies and organisations.
- Internally launch of the sustainability strategy and action plan.
- Periodic sustainability reporting issued across the organisation, communicating progress against KPIs as well as future aspirations or projects.
- Workshopping the Sustainable Productions volume of the Theatre Green Book with relevant internal stakeholders.
- Workshopping the Sustainable Operations volume of the Theatre Green Book with relevant internal stakeholders.
- Further carbon and sustainability literacy training for staff.

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