
SUSTAINABILITY STATEMENT

McDonald's Restaurant
Buxton

Planware Ltd
February 2024
Version 2

Table of Contents

1.	Introduction	3
2.	Sustainability Strategy	3
3.	Model Buildings Design	4
4.	Waste and Use of Recycled Material in Construction	6
5.	Minimising Transport Impacts and Reducing Carbon Dioxide Emissions	6
6.	Recycling Strategy and use of Recycled Materials	7
7.	Buxton Build	9
8.	Structure and Materials for the building	9
9.	Materials for the External Areas	9
10.	Internal Fit Out	10
11.	Building management control system	10
12.	Onsite Renewable Energy	11

1. Introduction

- 1.1 This statement has been submitted to support the discharge of condition 29 of HPK/2022/0300 for the *“Demolition of existing supermarket and erection of freestanding hot food takeaway / restaurant with drive-thru facility (sui generis), car parking, landscaping and associated works”* approved on 4th December 2023.

“No development hereby approved shall be commenced, until a detailed design and associated management and maintenance plan of the Sustainable Design and Construction for the development has been submitted to and approved in writing by the Local Planning Authority. All works shall be carried out in accordance with the approved details prior to first occupation of the development and thereafter maintained throughout the lifetime of the scheme.”

- 1.2 This report has been split into two sections:

- Overall Sustainability Strategy for McDonald’s Restaurants and their aspirations and sustainability policies for the future development.
- Site Specific Construction and Maintenance Plan for the new restaurant in Buxton.

2. Sustainability Strategy

- 2.1 McDonald’s are market leaders in their sector with their approach to sustainability and recycling, and major efforts are in place to reduce environmental impact both during construction and once the restaurant has been opened.
- 2.2 McDonald’s focus on sustainability and the environment is visible across its daily operations. The company has been working to reduce its environmental footprint for many years, including adopting innovative approaches to minimising energy consumption and waste management, using energy from renewable sources and working with communities to reduce litter.
- 2.3 The scale of the business means McDonald’s have an opportunity to have a positive impact on some of the biggest challenges facing the world today. The threat of climate change is one such challenge and McDonald’s are proud of the investment they have made to reduce their carbon footprint in the UK.

- 2.4 McDonald's was the first restaurant chain to set science-based greenhouse gas reduction targets at a global level. Working with all franchisees, their aim is to reduce greenhouse gas emissions related to all restaurants and offices by 36% by 2030. Additionally, McDonald's are committed to a 31% reduction in emissions intensity (per metric tonne of food and packaging) across the supply chain by 2030.
- 2.5 To meet these targets, McDonald's buy 100% renewable electricity and have invested in long term partnership agreements to develop the renewable energy infrastructure in the UK.
- 2.6 The absence of on-site fossil fuel use, together with McDonald's electricity procurement agreements, eliminates the production of greenhouse gases from on-site operations. In recognition of global warming potential (GWP) associated with refrigeration gases, McDonald's have moved to the latest reduced GWP air conditioning refrigerants ahead of any legislation in this regard.
- 2.7 The project will be working towards achieving the UKGBC Net Zero Framework Definition, for both operational energy and embodied carbon.

3. Model Buildings Design

- 3.1 McDonald's development team is committed on the journey to combating climate change by looking at ways new restaurants can reduce carbon emissions and execute a more sustainable operation. As part of the journey, it has been important to consider where we have started from, where we are and where we are going. The main objectives have been to review the current buildings and;
- Identify and target the reduction of high contributors to the restaurant carbon footprint.
 - Follow the principle of Reduce, Reuse and Recycle where possible.
 - Review and identify different construction techniques, materials and equipment to trial or assess further.
 - Review life cycle of building and its parts and action to reduce waste and increase circular economy.
 - Review ability to disassemble.
 - Review chain of custody of materials
 - Simplify and standardize more of the design across suite of model buildings.

- Enable inclusion of more sustainable technologies.
- Source more local materials/products and manufacturers.
- Include on site renewable energy generation where possible such as PVs and wind turbines.

- 3.2 Between 2021 and 2022 McDonald's opened pilot schemes in Market Drayton and Louth, which were built to the UKGBC net zero emissions standard. These developments have integrated these objectives with the goal of achieving a more sustainable installation when compared to the previous model building. Positive points taken from the exercise have been incorporated and used to develop a more sustainable model building design.
- 3.3 The latest building design is a balanced combination of all the design learns along with an approach to improve operations and offer additional future proofing. The design also evolved the language of the building to integrate modern retail design trends whilst maintaining links back to a recognized palette and McDonald's identity.
- 3.4 Some of the headline changes have been switching to more sustainable building materials that are either from a more sustainable source, contain recycled content and can be recycled at the end of life. The collection and recycling of restaurant waste into usable materials have also been positive actions. This includes repurposing coffee bean waste into internal signage and happy meal toy waste recycled into cladding boards. This has saved waste from landfill and provides a relatable message to some of the steps being taken.
- 3.5 This has all enabled a broader engagement to reduce carbon emissions and lead to a more sustainable operation. Whilst improvements have been made, the design and construction team are committed to the journey and are constantly looking at ways to progress sustainability further.
- 3.6 McDonald's ambition is to reach net zero emissions in restaurants and offices by 2030, and their overall goal is to reach net zero emissions across the entire business and value chain in the UK and Ireland by 2040.

4. Waste and Use of Recycled Material in Construction

- 4.1 McDonald's are challenging themselves to reduce carbon emissions in construction and use, and work with their suppliers to find solutions that will set high standards for the industry.
- 4.2 Building materials are sourced locally where possible and carbon-intensive materials have been replaced with alternatives made with recycled car tyres, plastic bottles, and white goods. This includes the following:
- Restaurant timber effect cladding panels: 47% recycled content
 - Restaurant dark grey cladding panels: 47% recycled content
 - Corral grey cladding panels: Recycled IT equipment
 - Plant parapet: Recycled plastic
- 4.3 Materials for the building are selected to provide the required aesthetics combined with maximum durability and robustness. The requirement for replacement, maintenance and repair will be minimal during the building lifecycles, thus providing a good low level of energy input over the whole lifecycle. Many of the materials used in the construction of the building are recyclable at the end of life, including the grey cladding panels to the corral, steel and rubber seals from the security doors, restaurant cladding panels, timber and aluminium window and door frames and the black cladding panels to the plant parapet.
- 4.4 From 2023, furniture will be sourced from recycled or certified materials and designed to be recycled or reused at end of life, as part of the McDonald's Plan to Change.

5. Minimising Transport Impacts and Reducing Carbon Dioxide Emissions

- 5.1 Cooking oil from restaurants is recycled into biodiesel using local collectors. The biodiesel is then used as fuel by McDonald's vehicles. Biodiesel is now being used in all delivery trucks and results in a carbon saving of 8,200 tonnes per annum.

6. Recycling Strategy and use of Recycled Materials.

6.1 Within the supply chain, McDonald's vision is one where all food and packaging is sourced sustainably. They have undertaken a number of measures in recent years to try to promote better environmental standards through the whole supply chain.

- McDonald's is committed to using recycled materials wherever possible, throughout the business and have stepped up their commitment to recycling further, setting global goals, including 100% of McDonald's guest packaging will come from renewable, recycled or certified sources and 100% of guest packaging will be recycled in McDonald's restaurants, by 2024.

6.2 The business has taken a number of steps to continue to lead when it comes to sustainable packaging and further address the issue of reducing plastic across the supply chain:

- The removal of plastic lids from McFlurry will see 385 tonnes of plastic removed from the supply chain each year.
- The introduction of fibre based salad boxes will also see 105 tonnes of plastic removed annually, and the new salad boxes can be recycled with any other paper.
- McDonald's are a member of the National Cup Recycling Scheme which brings together major retailers waste management companies and UK paper mills with the shared aim of growing the infrastructure needed to increase the number of paper cups being collected and recycled across the UK.
- McFlurry cups can be recycled along with other paper cups in one of the many recycling points that has been established across the country through the collaboration of retailers including Pret a Manger, Costa and McDonald's restaurants.
- Packaging recycling: 22k tonnes of outer packaging cardboard is recycled from restaurants every year - zero waste to landfill.
- Only 8% of the packaging used for McDonald's products is made from plastic, with the majority already being made from fully certified fibre.

- 6.3 McDonald's reuses delivery packaging wherever possible, in accordance with food safety laws. Over 80% of kitchen waste is recycled, which equates to 40% of total waste. Staff separate corrugated cardboard, used cooking oil, food waste, clean plastic paper and tin from all back of house areas for recycling.
- 6.4 All restaurants aim to recycle 100% of their corrugated cardboard, which in itself accounts for 15% of a restaurant's average total waste. In addition, the delivery trays and crates are returned to suppliers for reuse.
- 6.5 Delivery vehicles carry recyclable materials on return trips, backhauling over 80% of all cardboard.
- 6.6 McDonald's UK has a long-term goal to send zero waste to landfill by reducing operational waste, recycling as much as possible, and diverting the remainder to a more sustainable solution.
- 6.7 To further minimise waste, McDonald's has joined the Valpak distributor take back scheme, which ensures that redundant equipment is recycled with accredited companies.
- 6.8 Customer recycling stations are installed in all new restaurants, to allow customers to separate paper cups, plastic bottles and cups, and decant liquids. The cups will be sent to a specialist paper cup recycler and the plastic will be recycled along with the plastic from the kitchens. With good levels of separation, McDonald's new waste procedures could generate a recycling rate of up to 65%, exceeding the European target.

7. Buxton Build

- 7.1 Due to the sensitivity of the site and the surrounding area, the final design and fabric of the building has largely been dictated via the Planning Department and Conservation Team. This has limited the scope of the standard materials that have been scoped and proposed.
- 7.2 Approximately, 90% of new restaurants are built using modular construction techniques, which use considerably less energy, inclusive of the reduction of the total number of deliveries to site during the build. Whilst, due to the bespoke nature of the building, this has not been an available option, but with the use of a prefabricated steel shell, some of the benefits of the module build can be utilised and overall reduction on site.

8. Structure and Materials for the building

- 8.1 The modular construction takes place in a controlled environment, which allows a highly monitored and efficient process, where leftover materials can be used in future projects and ultimately reduce the general building waste, but due to the choice of material specified, the stone will need to be installed on site by a specialist company.
- 8.2 The external shell is designed to prevent air leakage and achieve the U-value required by current building regulation standards. The walls are insulated using British sheep's wool which is 100% biodegradable and the extent of glazing has been reduced compared to previous designs.

9. Materials for the External Areas

- 9.1 All the external furniture is produced using composite decking board, which is 60% wood fibre and 30% HDPE and fully recyclable. The parasols use 100% recycled membrane and the Car Park bins use 80% recycled plastic content.

10. Internal Fit Out

- 10.1 There are a number of initiatives introduced within the internal fit out, such as EPD certified floor and wall tiles; removal of the PVC vinyl on doors and replaced with laminate onto FSC plywood finish and removal of laminates in favour of sustainable laminate with recycled content in the toilet cubicles.
- 10.2 The furniture proposed includes bio laminates for benches and tabletops, sustainable vinyl and foam cores to furnishings, with 100% recycled graphic wrap; FSC certified timber Highchairs; recycled plastics used within the baby change facilities and - 100% recycled plastic or Ocean plastic fully recyclable including 21% steel and 18% aluminium office chairs.
- 10.3 The artwork, door signage and wall graphics are manufactured using recycled acrylic, recycled plastic bottles and coffee bean waste.
- 10.4 The recycling bins and condiment units which are fully recyclable and FSC certified timber and PVC free.

11. Building management control system

- 11.1 McDonald's utilise a sophisticated building management control system with specifically engineered energy reduction strategies to maximise operating efficiencies. McDonald's kitchen appliances have standby reminders and a metering system has been introduced which measures the amount of electricity used in every half hour of the day. Restaurant Managers receive daily graphs to help them make energy saving adjustments.
- 11.2 All new restaurants are fitted with standard equipment and maintenance programmes, in line with Green Building Guidelines, which were introduced as a McDonald's Europe initiative and include:
- Lighting - LED lighting is also used, resulting in a 50% reduction in energy use compared to fluorescent lights.
 - Motion sensor lighting

- Water - Auto shut-off taps fitted to wash-hand basins in addition to flow control limited to 6l/min; replacement of urinals with waterless units and WC's fitted with dual flush of 4.5l and 3l flushes (unless external drainage requires greater volume). In addition, systems are leak checked with hot water temperatures reduced to a maximum of 60 degrees C. Pipes are checked for missing insulation.
- HVAC - Automatic closures fitted to all internal doors and draft-proofing fitted or repaired to all doors and windows, including the use of energy save reminder stickers in the back of house area. Variable speed control fans are installed so that they are not required to run when ventilation is not required and room sensors installed to monitor internal air temperatures.

12. Onsite Renewable Energy

- 12.1 Due to the tight parameters on the overall design of the building, there has been limited scope for the introduction of Photovoltaic panels on the site, there was a compromise achieved with the installation of PVs on the cycle shelter, which will generate 4.98 kWp with an annual energy production of 4.29 Mwh, which is the equivalent of 38 trees planted (annually) and an annual CO2 emission saving of 830.07kg.