OUR PROBLEM

The climate clock is running out by 2030. If we do not take immediate action, our carbon budget will run out, meaning that we can no longer limit global warming to 1.5 °C. With the clock running out comes an increased risk of devastating global climate effects.

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WE ARE RUNNING OUT OF TIME

GREENHOUSE GASES

DYING TREES

GLOBAL WARMING

((THE WORLD IS REACHING THE TIPPING POINT **BEYOND WHICH CLIMATE CHANGE** MAY BECOME **IRREVERSIBLE.** "

- Kofi Annan, Former Secretary-General of UN.



THE BRIEF: WHAT IS 15 ?

'15' showcases what the sustainable future of retail could look like were we to lower our carbon footprint before the climate clock deadline. From materiality to technology implementation, '15' uses research of trends and future forecasting to create the sustainable shopping experience of tomorrow.

Situated within a sustainable 15-Minute City area, '15' welcomes local businesses to sell their products inside the '15' retail space, catering to the local community and to our regular protagonists using the space. '15' fosters strong, sustainable community bonds and supply chains at its core through responsible retail infrastructure.



FLOODS

DROUGHTS





THE FUTURE

By predicting what the future may look like, we can get ahead and innovate faster. We already know what the future of the planet will be if we do not take action, but how can we make sure we innovate while also taking care of the planet?

FUTURE RETAIL TRENDS



More and more businesses are using data and digital technologies to tailor experiences, services, products, etc, to individuals, moving away from maximising supply chains and moving towards personalizing demand chains. (Genpact, N.D.)

Consumers' expectations of how they use stores is shifting towards a multi-functional purpose, there to support a digitally influenced customer journey of click-and-collect. (Retail Economics, 2023)

FUTURE TRENDS CONE



PREFERABLE

We limit global warming to 1.5 °C before the climate clock runs out.

PROBABLE

We do not limit global warming to 1.5 °C before the climate clock runs out.

WILDCARDS

1. A massive worldwide effort to limit global warming is put in place by world leaders with the target of beating the climate clock.

2. An anomalous cosmic event speeds up the rate of global warming, rendering all of our sustainable efforts useless.

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Many factors, such as consumer expectations, environmental emergencies and global health threats are forcing retail companies to move from linear production to regenerative, circular economies. (Retail Economics, 2023)

Consumers are embracing pre-loved goods as it becomes more trendy, finances are squeezed and they become more environmentally conscious of consumerism. (Retail Economics, 2023)

AI - HOW DOES IT SEE THE FUTURE?





LIMITED MATERIALITY









SIMPLE FORMS



'15' IMPLEMENTATION OF FUTURES TRENDS

LED LIGHTING

AI-POWERED ROBOT ARM



GROUND FLOOR STORAGE



GROUND FLOOR EXPRESS ESSENTIALS

CURATED MATERIALITY



FOURTH FLOOR THRIFT STORE

PRE-LOVED CLOTHING



CLICK & COLLECT BROWSE EXPRESS CHECKOUT

TECHNOLOGY INTEGRATION

THE SITE OF THE FUTURE

WHY THIS SITE?

In the heart of the University of Manchester campus and only a stone's throw away from Manchester Metropolitan University, this site has an abundance of youthfulness surrounding it.



67% of Young Adults aged 16-29 are very to somewhat worried about climate change.

This offers an opportunity to create a sustainable hub in a demographic area that will engage with the space, creating an accessible shopping experience that lines up with their purchasing values.

Manchester Oxford Road Statistics



18 Individual Bus Routes One of the busiest bus routes in Europe



By 2038 Oxford Road is aiming to be carbon neutral by 2038



Cyclists since 2017

THE PROTAGONISTS



The Earth is slowly dying. If we do not reduce our greenhouse gas emmissions by 2030, it will be too late to reverse the effects of global warming. The main protagonist for this space is Planet Earth itself, as the space aims to showcase what our sustainable future could look like in the year 2030, assuming the preferred outcome that we do reduce greenhouse gas emmissions



SITE ANALYSIS



LEAST PROMINENT

'15' RETAIL SPACE FRONT-SIDE VIEW





'15' RETAIL SPACE FRONT VIEW

MOST PROMINENT

There are a number of commercial buildings near 15, as well as Manchester Royal Infirmary, and of course the Manchester universities. This means that there are a lot of professionals, educators and medical staff that work and travel within a 15-minute radius of 15. The design of the store keeps in mind the needs of professionals by incorporating an 'express essentials' area in the store.



There is a large student residential presence within a 15-Minute radius of 15, as well as 15-Minute radius of 15, as well as some private residential housing. A superstore will attract a lot of interest from those residing in the vicinity, so their requirements must be carefully examined to create the right space for those that live there, not just pass through.

THE FUTURE IS HERE

Climate change isn't waiting around. Climate change is the future, and the future is here. '15' is staying ahead of the future by addressing it now.

THE SOLUTION

'15' is not the solution to climate change. However, it is a step in the right direction. '15' is showing that retail can be sustainable and responsible, and is aiming to be a pioneer for sustainable retail design.

HOW?

By using future trends research of consumer habits and climate trends, '15' uses sustainable materials created using new technologies and processes, as well as housing sustainable shops selling pre-owned or locally-sourced products, to showcase what the future of retail could look like.





'15' RETAIL SPACE SECTION

The Fourth Floor Cafe / Seating Area / Thrift Store

The Third Floor Local Artist Showcase / Reading Nook / Library

The Second Floor AI-Powered Audio-Visual Listening Booths / Vinyl Store / Rest Stop / Electronics Store

> The First Floor Pharmacy / Greengrocers

> > **The Ground Floor**

Customer Service / Toilets / Express Essentials / Staff Space / Storage / Pickup Point

CHANGING THE FUTURE





Scientist link extreme weather to climate change after a heatwave in Europe kills thousands of people.



The UK Climate Change Act is made a law. This becomes the first long-term legally binding climate change law, requiring the government to set 5-year carbon budget targets.





THE MATERIALS OF THE FUTURE

Antarctica.

1938

Proof that global

temperatures are rising.

Amateur scientist Guy

Callendar discovered that

global temperatures had

risen by 0.3°C over the past

50 years.



REPURPOSED CONCRETE

As the site is a brutalist, concrete building, concrete is an important material in the materiality of the project. Fortunately, concrete is aesthetically a contemporary material and the building can be stripped back, with the exposed concrete being allowed to come through.

By no means is concrete a sustainable material, but it is already part of the building. The concrete will be exposed as to minimise the amount of material needed to cover it up.

The concrete found in the building is also repurposed for creating staircases and walls in order to minimise the material waste.

ALUMINIUM

Aluminium serves both a practical and an aesthetic purpose. Its shiny and reflective appearance creates a clean and futuristic look, while its versitility means that it can be used for a variety of applications.

Most importantly, Aluminium is 100% recyclable, making it a perfect material for the sustainable values of '15'.



- Made from 100% recycled plastic, this material would be a perfect fit for counter tops inside the shop stalls, as well as for other surface needs.
- This material is also made from 100% recycled material and it is 100% recyclable at its end of life, with a buy-back scheme by Smile Plastics once the material is no longer needed.
 - Pictured are the following material finishes;
- Quarry, Heron in Green, Heron in Marine Blue, Ocean (Custom '15' Blue, in collaboration with Smile Plastics), and Heron Duo (Custom '15' Purple, in collaboration with Smile Plastics).

WHY ARE THEY THE MATERIALS OF THE FUTURE?

The materials chosen to represent '15' are either 100% sustainable, 100% recycled or 100% recyclable. This is what is required of modern building materials in order to limit our carbon footprint and work towards the 2030 climate clock target.



WE ARE HERE



The Paris Agreement is reached to reduce carbon. 196 countries sign the Paris Agreement and agree to limit global warming to less than 2°C.



Irreversible. A lot of aspects of climate change are now inevitable or irreversible, such as sea level rise, the melting of Arctic ice, and the warming of oceans.



The '15' Retail Space concept is born, aiming to work ahead of the 2030 climate clock deadline in order to showcase what the sustainable future of retail could look like.



The Climate Clock runs out, meaning that theoretically we can no longer limit global warming to 1.5°C.



Temperatures are predicted to increase by an additional 1.5°C by 2050/

GROUND FLOOR EXPRESS ESSENTIALS





FOURTH FLOOR CAFE