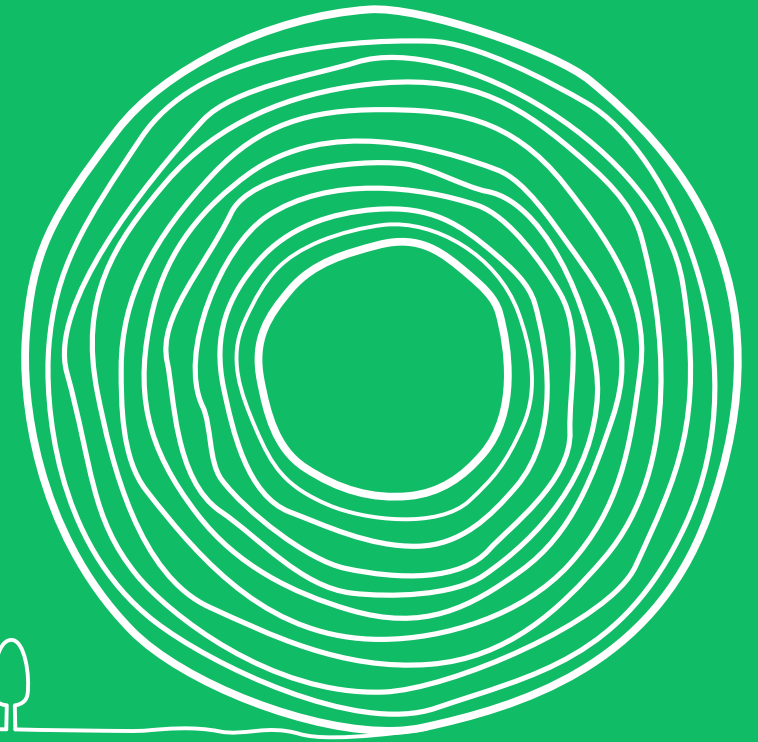


Leeds Doughnut



Towards a safe and thriving city for all

The first Leeds Doughnut City Portrait

April 2022

Welcome to the Leeds Doughnut City Portrait



We are using an approach called 'Doughnut Economics' to create a portrait of the state of Leeds right now.

This document summarises a longer more detailed report. This summary is available on our website for anyone who is interested in how Leeds can become a thriving and safe place for everyone.

The Leeds Doughnut is a project of Climate Action Leeds, a National Lottery funded project promoting community led climate action.

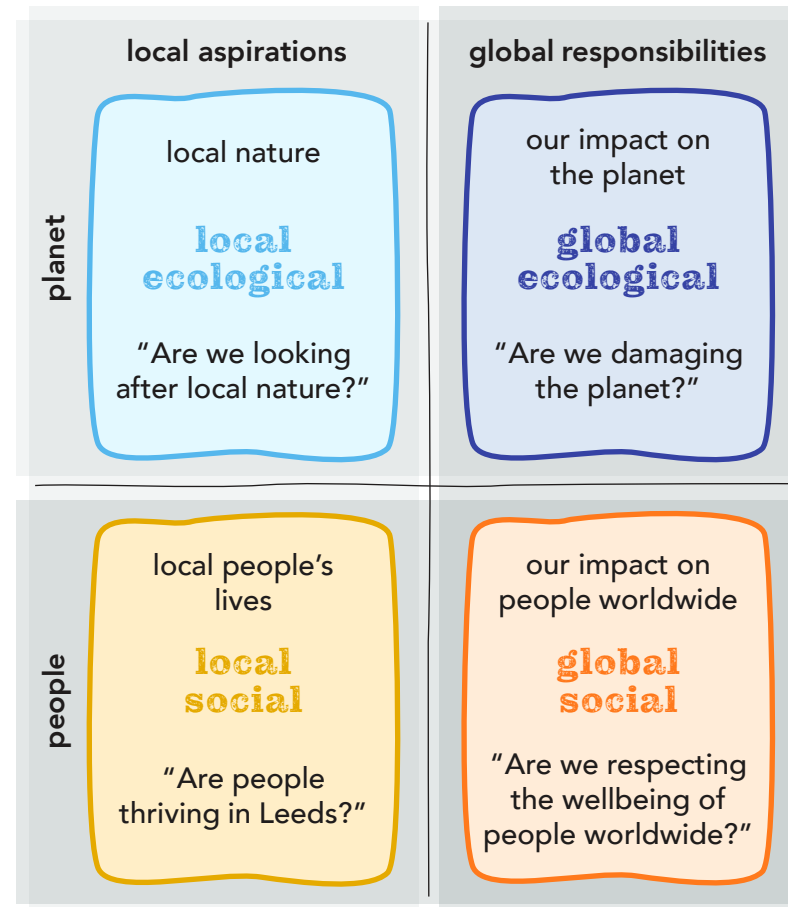
The Doughnut framework introduces a new way of thinking which can help us tackle the complex local and global challenges ahead, together.

We hope this will be useful in Leeds and beyond - for researchers, policy makers, politicians, social entrepreneurs, community activists and residents.

We see the Leeds Doughnut City Portrait as part of a bigger conversation about how we respond to climate change - how we protect nature, live a zero carbon way of life, and leave no one behind.

The Leeds Doughnut City Portrait is our first step towards creating a city plan that will enable us to create a zero carbon, nature friendly, socially just Leeds by the 2030s.

Our City Portrait shows a snapshot of Leeds across four areas:



Understanding the Doughnut

Doughnut Economics comes from the work of Oxford economics professor Kate Raworth. It is a guide for how places can respond to the challenges of the 21st century.

The doughnut is a simple idea...

Imagine the outer edge is a ceiling, above which the planet cannot function. Now, imagine the inner part is a floor of human living conditions, which no one should fall below. This leaves a doughnut in between - the place where all of us can thrive and be safe. We call this 'the safe and just space for humanity.'

The Doughnut approach is a way to think about how our place can meet its local aspirations while also living up to its global responsibilities.

This approach has been taken up by people all across the world, and is supported by the Doughnut Economics Action Lab.

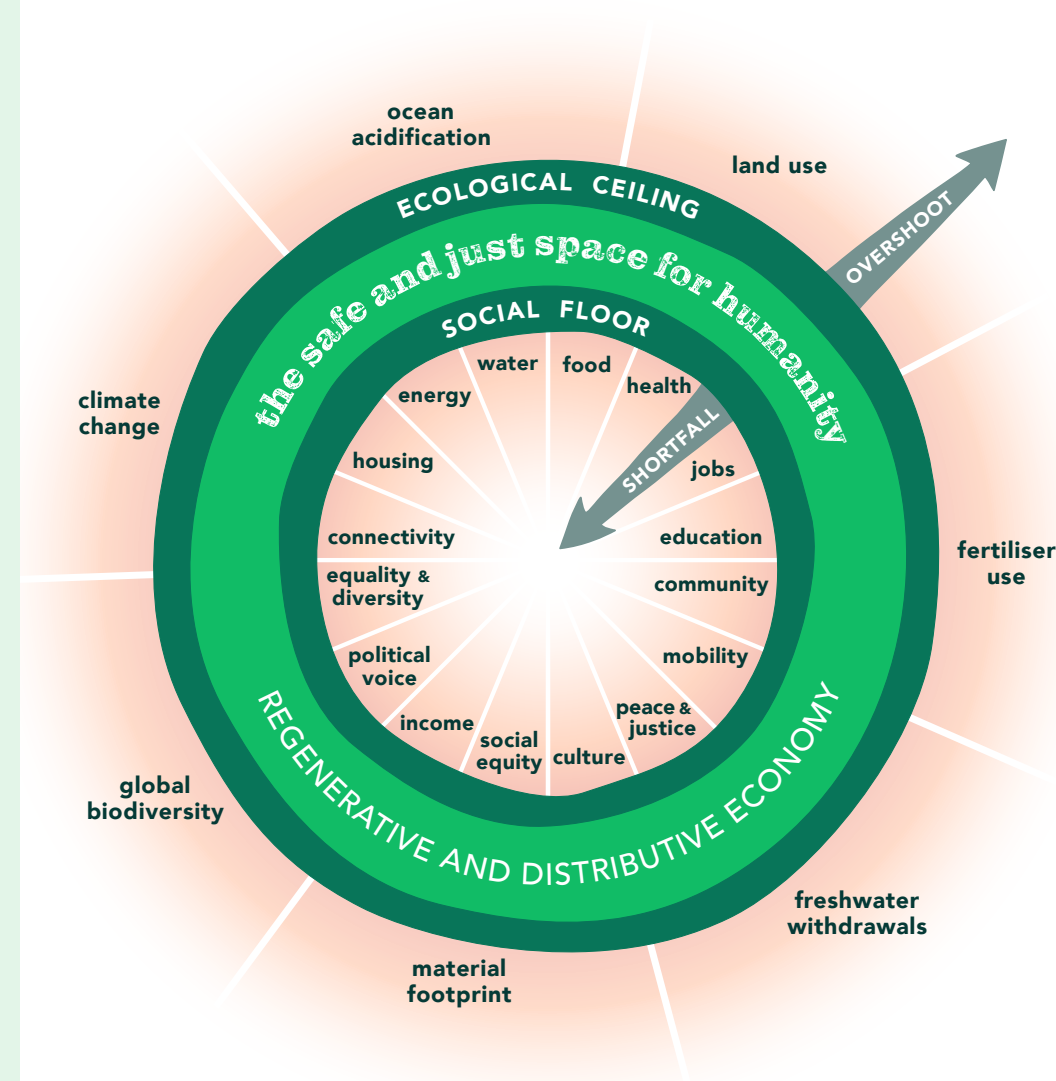
This document is a summary of our findings that take you on a journey of Leeds through four questions.

Overall we have found that Leeds, like many other developed cities, is not in the Doughnut where people are safe and can thrive.

Leeds falls below the social floor in many aspects and considerably overshoots the ecological ceiling.

This is a call for all those in Leeds who want to support this work and get Leeds into the safe and just space of the Doughnut.

Let's start our Doughnut journey through Leeds!



Can Leeds live within the Doughnut?

Our aim is for life in Leeds to be within the Doughnut - for Leeds to be a safe and thriving place for all. To start our journey and to explore how Leeds can live within the Doughnut, let's unroll it...

As we unroll the doughnut, we lay out the path of our journey to a safe and thriving Leeds. Our path has a social floor that we must not fall under and an ecological ceiling that we must not overshoot.

To understand what this means on our journey we ask four questions: First, we look at our **local aspirations** in Leeds by asking:

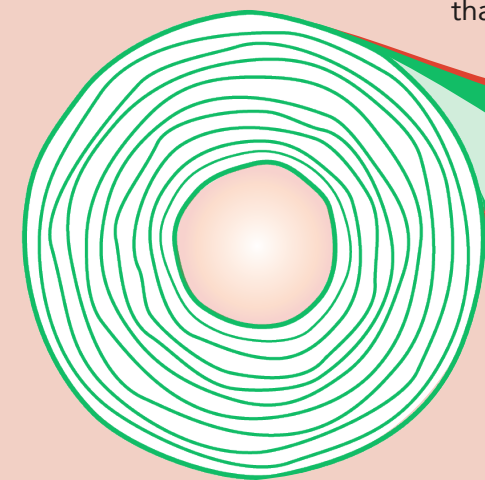
- Are the people of Leeds living well and thriving?
- Are we looking after and supporting our local nature so it can support life in Leeds?

Second, we turn to our **global responsibilities**, asking:

- How are we affecting the wellbeing of people around the world as a result of life in Leeds?
- How are we impacting the health of the whole planet as a result of life in Leeds?

Asking these four questions together is incredibly important. It allows us to see if we are meeting local aspirations and global responsibilities, for both people and planet.

In other words, is life in Leeds in the safe and just space of the Doughnut, and if not what can we do to move towards it?



ecological ceiling

safe and thriving place for all

social floor

Looking at where we've come from

Before we begin our journey through Leeds' current reality, let's take a look at where we've come from to understand what has shaped life in our city...

Leeds played a big role in the industrial revolution, which led to many pioneering innovations and innovators that changed the world for the better.

Leeds' leading role in the industrial revolution means it has already emitted more than its fair share of carbon emissions.

Continued growth is putting pressure on biodiversity, animals and nature.

Leeds continues to grow and develop as a city, attracting exciting new talent and offering opportunities for existing residents.

The COVID-19 pandemic set Leeds back especially in terms of health inequality and sustainable transport, but also opened up new opportunities for local life and homeworking.

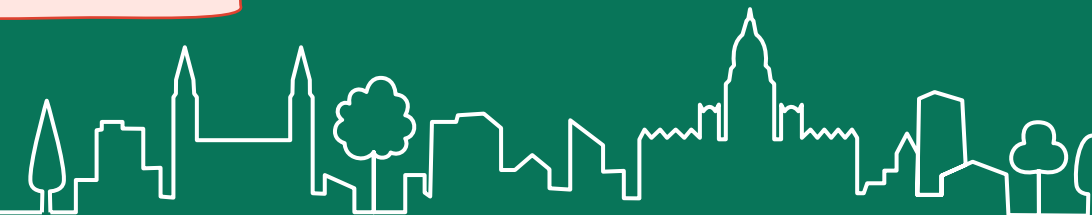
10 years of austerity has hit Leeds hard. Central government cuts have really limited what the local council can do.

Leeds is a large, diverse city in terms of people, place and culture - we need better ways for these voices and experiences to be heard and included.

Leeds faces constraints from central government, lacking the power and money to act on deep issues.

Many parts of Leeds are booming, but other parts are left behind. It is a city of divisions.

Leeds has many social challenges such as poverty and inequality. These have been around for decades and are getting worse.



local social

Are people in Leeds thriving?

The first question on our journey focuses on local social life in Leeds.

We ask a simple question that can guide our local aspirations as a city: **How can people in Leeds live well?** By this we mean, have a safe life and thrive across areas like work, health

and education but also community, political voice and inclusion.

We use 16 areas of social life, largely reflecting the United Nation's Sustainable Development Goals.

Let's see how we are doing...

Case study

[Leeds Community Homes](#), set up in 2017, aims to create and enable more community led, sustainable and affordable homes in Leeds and beyond.

As a community land trust, they can acquire land and help groups to develop new schemes of housing development that takes housing away from profit-led developers to communities themselves. Through community shares schemes and other methods, to date they have raised over £350,000.

ecological ceiling

- "All Leeds residents will be living in good quality affordable homes"
- "All homes in the city are of a decent standard and everyone can afford to stay warm"
- existing Leeds City ambitions...**
- "Leeds will be a city where people who are the poorest improve their health the fastest"
- "The city has a strong economy with quality local jobs"
- "Every child and young person has the opportunity and support to achieve their potential"
- "For Leeds to have strong, engaged and well-connected communities"
- "Zero people are killed or seriously injured on Leeds roads by 2040"
- "Everyone in Leeds is safe and feels safe"
- "Leeds will be a city where local culture and sporting activities will be available to all"
- "Everyone in Leeds earns enough to support themselves and their families"
- "For Leeds to be inclusive, where all citizens are treated fairly"
- "For Leeds to be 100% digitally connected and competent"



some facts about social life in Leeds...

Leeds has the largest museums service in England and Wales run by a local authority.

local ecological

Are we supporting and protecting local nature?

Our second question is about the state of local nature in Leeds.

To guide our local aspirations as a city we ask: **How are we looking after and supporting local nature so that it can support life in Leeds?**

Leeds has a wealth of natural resources. We know that this nature

provides important services to support a thriving life in Leeds. Clean water to drink, air to breathe, habitats for many different species and land for storing carbon and producing renewable energy.

Let's have a look at the state of 8 key aspects of local natural systems in Leeds...



Air

Air quality

IN NATURE Plant leaves can intercept ultrafine particulate matter from the air and break down pollutants.	TO BE LIKE NATURE Examples of good practice such as the large green 'living wall' at the Veolia Recycling and Energy facility should be explored across the city.
CITY TARGET To achieve the World Health Organisation's (WHO's) air quality targets.	CITY SNAPSHOT Air quality in Leeds is rated as Good in the WHO rankings. However, some areas like the city centre and inner ring road fall short of air quality objectives for nitrogen dioxide, a main pollutant of concern.

Clean water cycles

IN NATURE Natural hydrology operates a cycle of evaporation, condensation and evapotranspiration provides a renewable source of clean water.	TO BE LIKE NATURE Leeds could reintroduce elements of natural hydrology, by for example, increasing natural filtration through areas like reed beds.
CITY TARGET No target identified.	CITY SNAPSHOT The River Aire achieved 'Moderate' water standard a in 2020 Environmental Agency survey.



Water

Managing floods & water flow

IN NATURE Plants, permeable surfaces and wooded areas slow down water run-offs and capture rainwater, allowing it to replenish groundwater levels rather than spilling into populated areas.	TO BE LIKE NATURE Leeds is encouraging sustainable urban drainage at new developments. Examples are CITU and Lilac which have integrated Sustainable Drainage Systems that mimic nature in their design.
CITY TARGET Leeds City Council's Local Flood Risk Management Strategy and Flood Alleviation Scheme (FAS) aims to increase flood resilience across the Aire Catchment and parts of the Wharfe.	CITY SNAPSHOT Over 11,000 properties in Leeds are at medium to high risk of being flooded.



Land

Supporting biodiversity

IN NATURE Nature provides habitats for plant, animal and insect species. These species are critical for ecosystems to work for food supply, clean air, pollination of plants and pest control.	TO BE LIKE NATURE Leeds has restored a 400-hectare old mineral site into a new reserve called St Aidan's, with the help of RSPB. The site now holds reedbed, wetland, woodland, meadows and 12km of public trails.
CITY TARGET As of November 2021, Leeds City Council legally requires all developments to achieve a minimum 10% net biodiversity gain.	CITY SNAPSHOT Leeds has 1 hectare of Local Nature Reserves per 1,067 people living in the city.

Capturing carbon

IN NATURE Trees and plants absorb carbon dioxide through photosynthesis, using this to grow organic matter and store carbon. This helps clean the air.	TO BE LIKE NATURE Leeds is contributing to the White Rose community forest project and in turn, the Great North Forest, significantly increasing tree canopy cover across the region.
CITY TARGET In 2019, the Leeds Tree Strategy was introduced which aimed to plant 5.8 million trees over the next 25 years.	CITY SNAPSHOT Currently about 17.1% of Leeds Metropolitan area is tree canopy (9,434 hectares). To offset carbon emissions, this must be increased to 33% - an additional 9000 hectares.

Harvesting energy

IN NATURE Plants harvest energy from sunlight through photosynthesis.	TO BE LIKE NATURE Leeds could increase land allocation in the Council's Local Plan Update to support expanded renewable energy generation.
CITY TARGET Leeds City Council aimed to achieve at least 75 megawatts of installed, grid-connected renewable energy capacity by 2021.	CITY SNAPSHOT By 2019, there were 43 megawatts of installed grid-connected renewable energy capacity, with a consented capacity of 77.9 megawatts.



Matter

Regulating temperature

IN NATURE Forests and trees cool local air temperatures through evapotranspiration and the provision of shade.	TO BE LIKE NATURE Leeds is supporting a major public realm initiative 'from grey to green' which is already creating new major greenspaces in Leeds.
CITY TARGET No target identified.	CITY SNAPSHOT Currently, there is no data available in Leeds. However in partnership with the universities, Leeds is developing heat sensors for around the city.

Processing waste

IN NATURE The concept of 'waste' is a human one; it doesn't exist in nature. All matter recycles and has its uses.	TO BE LIKE NATURE Leeds should commit to a specific policy aim of transitioning to a circular economy by 2040.
CITY TARGET For Leeds to become a 'world leader' in eradicating 'unnecessary' waste.	CITY SNAPSHOT The recycling rate for domestic waste in Leeds has increased from 20% in 2004 to 39% in 2020, just lower than the English average of 44%.

Case study

[Hyde Park Source](#) - improving health and wellbeing through improving the environment.

Hyde Park Source is based in LS6 but is active all over Leeds. For the last 24 years they have been working with local communities to improve their surroundings by designing and creating attractive, exciting, safe and useful places to live, work and play.

Inspired by Permaculture, they provide environmental and outdoor education across Leeds and have helped to develop hundreds of community gardens, creating spaces where nature and people thrive in harmony.

ecological ceiling

social floor

global social

Are we in Leeds respecting the wellbeing of people worldwide?

Our third question is about our impact on people across the world.

To guide our global responsibilities as a city we ask: **How are we affecting the lives of others across the world as a result of life in Leeds?**

To understand this we need to consider all the supply chains linked to the goods and services we buy in Leeds.

All of these have consequences such as child and forced labour, workplace harms, ill health and the use of land. We must recognise and take accountability when our practices in Leeds all have an effect on people somewhere else in the world.

Let's see how we are doing...

Case study

[The Racial Justice Network](#) (RJN) brings together people, communities and organisations from across West Yorkshire to end racial injustice and address the legacies of colonialism. They advocate for a movement that tackles both climate injustice and racial injustice, with "holistic, economic, spiritual and cultural repairs" as guiding values.

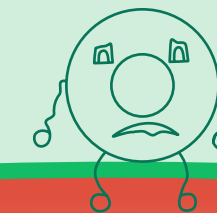
The RJN supports communities, individuals and groups to challenge and overcome oppressive practices. They do this by developing people's awareness, skills and confidence. They run effective campaigns and build solidarity networks to mobilise large communities of resistance.

Learning for the Leeds Doughnut

The RJN's 13th Recommendation provides a framework for the climate movement in Leeds to account for the city's colonial legacies. It embeds the principles of internationalism and decolonial thinking into local climate action.

Ensuring that Leeds steps up to recognise its global responsibilities is central to the transformation of Leeds to a safe and thriving place. In the words of the RJN, "there is no climate justice without addressing the international impact of actions on a local level".

ecological ceiling



child labour

In 2018, there were more than 21,000 child labourers in the global supply chains resulting from consuming goods and services in Leeds.



air pollution

There are 580 air pollution related deaths traceable to consumption supply chains that Leeds depends on. Of these, 251 occur in Leeds, 157 across Asia and the remaining 172 across the rest of the world.



workplace safety

Goods and services imported into Leeds result in 25 workplace fatalities and 13,500 injuries a year elsewhere in the world.



forced labour

Global supply chains linked to consumption in Leeds draw on an estimated 1,700 forced labourers.



land use

Nearly half a million hectares of cropland and grazing area across the world is required to support goods and services imported into Leeds. This is twice the size of the Yorkshire Dales.



material footprint

Consumption in Leeds relies on extracting an estimated 540,000 tonnes of metal ores per year - that's 0.7 tonnes per person, which are mined elsewhere.



global ecological

Are we in Leeds respecting the health of the whole planet?

Keeping with global responsibilities, the fourth question of our journey asks: **How are we affecting the whole planet's health as a result of life in Leeds?**

We use the idea of a footprint to explore this. While the footprint of

the city of Leeds is a certain size, the footprint from its use of resources, land and greenhouse gases goes far beyond that and stretches across the world. On our journey, we look at carbon, oceans, biodiversity, use of chemical fertilisers, our use of water and raw materials.

Let's take a look at the current picture...

Inequality

Our portrait is based on the impact of the *average* resident in Leeds on the health of the planet.

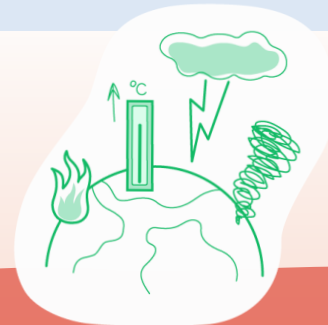
But there are important differences between those on higher and lower incomes. Because they consume and travel more, higher income groups in Leeds are having a bigger impact on local nature, the planet's health and the livelihoods of people worldwide.

For example, while the lowest 20% of earners in Leeds exceed safe levels of carbon use by three times, the highest 20% of earners exceed it by 11 times! So not everyone in Leeds is equally responsible. We have to make sure this inequality of responsibility is central to our work.

Case study

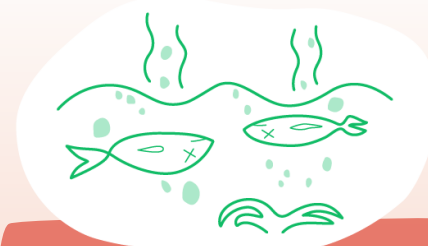
[Zero Waste Leeds](#) is a city-wide project and movement which tackles the challenge of global emissions linked to local consumption in Leeds.

They aim to help Leeds become a 'zero waste city' by 2030. They do this by creating innovative campaigns and facilitating alternative, circular economies for things like clothing, school uniforms and sports equipment. Their approach is grounded in collective provisioning, repairs, re-use, exchange and recycling.



climate change

Each person in Leeds is responsible for producing 9.6 tonnes of carbon per year, which exceeds the safe boundary of 1.6 tonnes by almost 6 times.



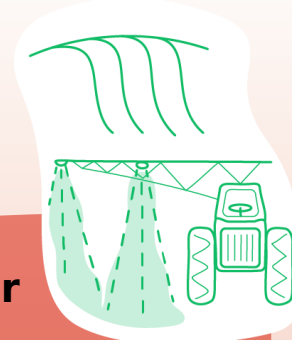
ocean acidification

High carbon activity and lifestyles in Leeds are driving ocean acidification. The safe global boundary is exceeded by a factor of almost 6.



land use

The global land footprint of an average resident in Leeds is 2.3 times the safe boundary.



fertiliser use

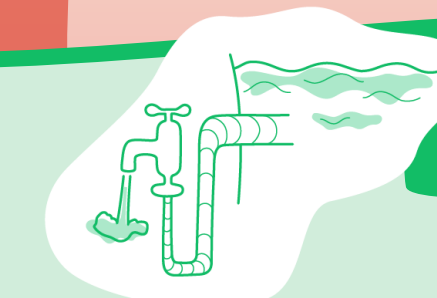
Across the world, humans use chemical fertilisers beyond a safe limit by a factor of 2-3. In Leeds, the average person exceeds the safe limit over 5 times for phosphorus, and over 7 times for nitrogen.



In Leeds, an average person can be linked to the use of over 13.2 tonnes of materials such as fossil fuels, wood and metals, exceeding safe planetary boundaries almost twice.

material footprint

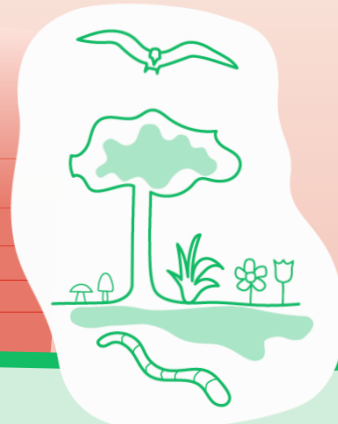
Water is abundant enough in Leeds that the current use of 220m³ per person each year is well within the safe global boundary of 574m³.



freshwater withdrawals

The average Leeds resident has a biodiversity footprint exceeding safe planetary boundaries.

global biodiversity



ecological ceiling



social floor

The Leeds Doughnut ...rolled back up

This diagram shows how much of Leeds is in the doughnut. It shows that across most aspects of local social life, we are falling below a minimum social floor of a thriving life, and that we could better protect and support our local nature. Globally, life in Leeds is generally damaging the health of the whole planet, and we are falling short of protecting people across the world.

How we support nature so it can support us

Urgent flood defence work is being carried out as over 11,000 properties in Leeds are at medium to high risk of being flooded.

Leeds City Council's Tree Strategy aims to increase tree cover from 17% to 33% over the next 25 years by planting 5.8 million trees.

The recycling rate for domestic waste in Leeds is 39%, lower than the English average of 44%.

Air quality in Leeds is currently rated 'Good' in World Health Organisation rankings, but areas of the major road network exceed annual objectives for nitrogen dioxide.

local ecological

How people in Leeds are living

16.8% of Leeds households were considered to be in fuel poverty in 2019.

People in more deprived areas of Leeds live 10.5 years less than those in least deprived areas.

In 2021 there were 3,654 hate crimes in Leeds.

A 2020 survey showed that 78% of Leeds residents were satisfied with their local area as a place to live.

In 2020, 24% of children in Leeds aged 16 or under were living in poverty.

House prices in Leeds are on average 6.3 times higher than average gross annual earnings.

global ecological

How we are affecting the health of the whole planet

The global land footprint of an average resident in Leeds is 2.3 times the safe boundary.

We are using over 13.2 tonnes of raw materials each - exceeding safe planetary boundaries almost twice.

The average person in Leeds exceeds the safe limit for phosphorus over 5 times, and over 7 times for nitrogen.

Each person in Leeds is currently responsible for producing 9.6 tonnes of carbon per year, which exceeds the safe boundary of 1.6 tonnes by almost 6 times.

25 workplace fatalities and 13,500 injuries happen because of the goods and services imported into Leeds.

Global supply chains in Leeds are linked to an estimated 1,700 forced labourers and more than 21,000 child labourers.

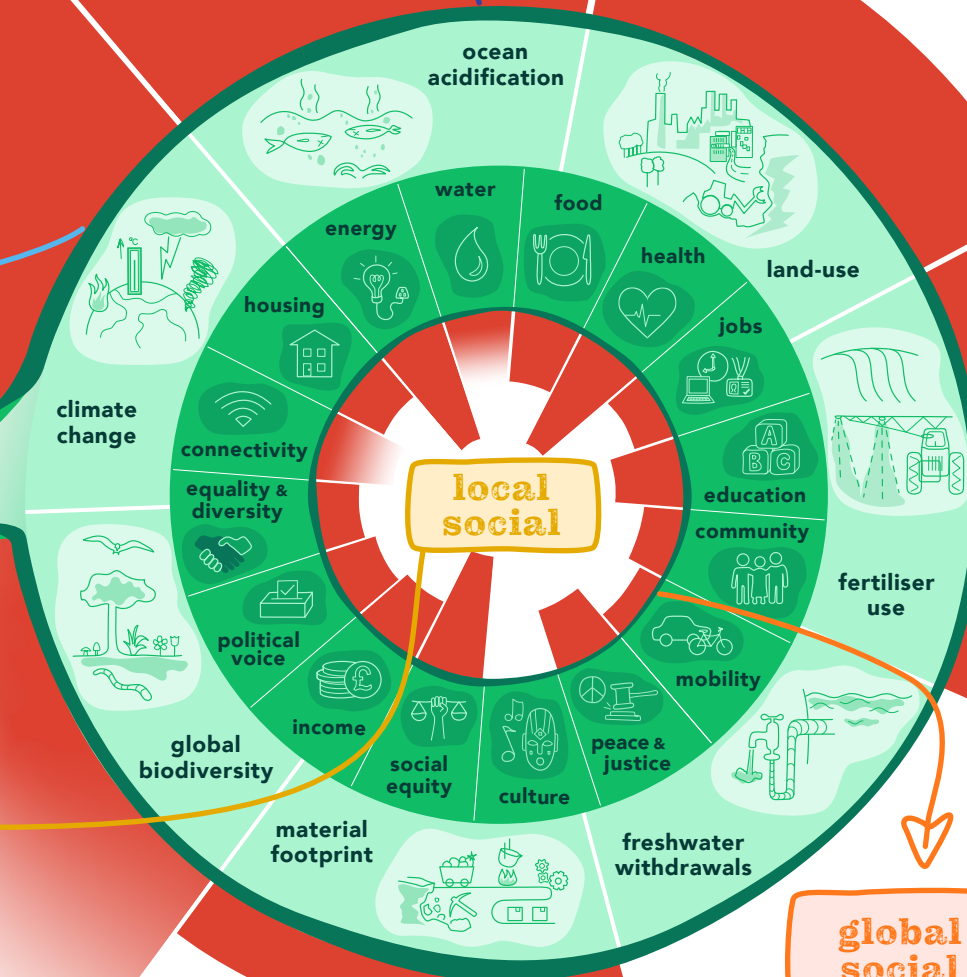
Nearly half a million hectares of cropland and grazing area is required for imports into Leeds currently.

How life in Leeds is affecting people in the rest of the world

Consumption in Leeds relies on extracting an estimated 540,000 tonnes of metal ores per year - that's 0.7 tonnes per person.

local social

global social



What does your city portrait look like?

The City Portrait is an initial snapshot of where we are at. This is just the beginning.

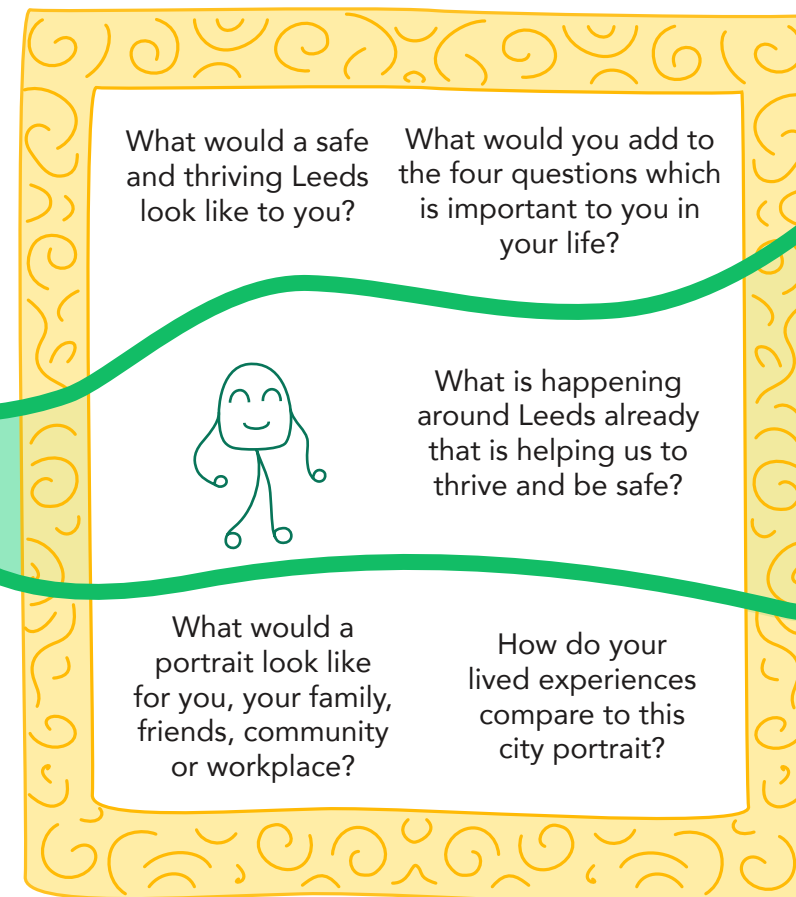
There is much to be done, by us at Climate Action Leeds but also by everyone in Leeds!

To turn our work into transformative action across Leeds, we have to understand what a thriving, safe city

means to all kinds of different people and communities. We have to explore what practical action we can take together to move us towards the safe space of the Doughnut.

To help us on this journey, we can learn from and showcase the brilliant things already happening in our city and beyond.

From our first Leeds Doughnut City Portrait... to yours...



Here are some examples of what moving towards the Doughnut could mean:



To create the path we want to be on, this portrait is an invitation to ask:

How did we get here?

How do we change course – and to what?

What are we already doing in Leeds that can help?

What now?

Our and your next steps

This portrait is a starting point for conversations about how we can move life in Leeds towards the Doughnut.

To continue this conversation, our next steps include exploring connections across our four questions in terms of how they influence each other.

We are having conversations far and wide, across Leeds. We'd like to learn

and share, and ultimately support practical action for change across the city.

This Doughnut approach is supporting a broader city-wide planning process in Climate Action Leeds. The overall aim of Climate Action Leeds is to create a zero carbon, nature friendly, and socially just Leeds by the 2030s.

We want to work with:

- Communities across Leeds - to explore how their lived experiences are reflected in the City Portrait and to support them to create their own portraits
- Sectors like energy, housing and food - for necessary strategic action planning
- Young people - to champion their role in tackling the challenges ahead
- Leeds City Council - to help support strategic planning in Leeds
- Climate Action Hub group - to showcase and promote this work in Leeds City Centre
- The business community - to engage in conversations about the meaning and reality of a 'doughnut business'
- Inspiring projects around Leeds - to learn from, amplify and showcase work that is helping us move towards the Doughnut
- The research community - to create a network of researchers across Leeds' universities and colleges to support future work
- Other Doughnut cities - to connect with, support and learn from our local and global colleagues on this journey



We hope this journey through the Doughnut has been useful. If so, join us for a decade of transformation!

Get in touch with the team

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Find out more by visiting our website www.climateactionleeds.org.uk

Download this summary and the full report online at www.climateactionleeds.org.uk/leedsdoughnut

Credits

Text written by Jenni Brooks, Paul Chatterton and Catriona Rawsthorne
Illustrations and design by Jenny Bull

*This summary draws on a wide evidence base. Please see the full report for references.

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