



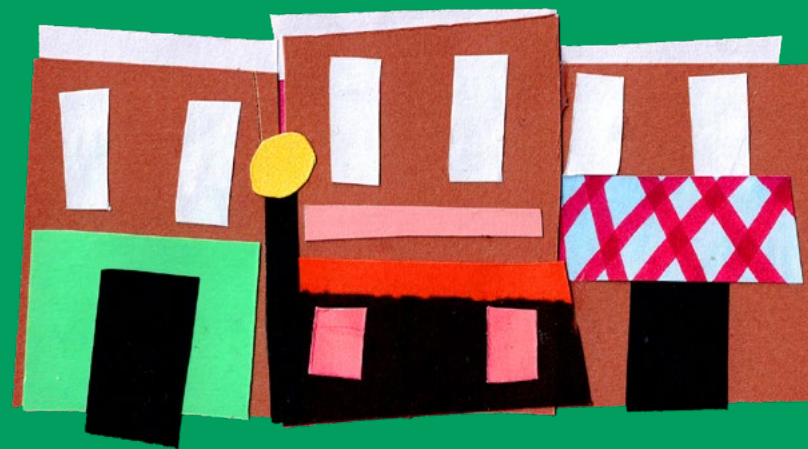
LONDON CITY PORTRAIT

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OUR CALL A BETTER FUTURE FOR LONDON



LONDON DOUGHNUT ECONOMY COALITION

Can we shape a new approach to London's economy?

What would it take for all of London's people to thrive? What would it take to achieve this while respecting the wellbeing of all people everywhere and keeping the natural environment in good health?

London is a fantastic and dynamic city that we call home. It's an economic powerhouse and known all over the world for its cultural life and diversity.

Despite these strengths, London's economy clearly faces challenges.

London still accounts for one third of the UK's GDP, but it lags behind other cities in the track of its productivity growth.

It is also clear that London's economy does not support all Londoners to live well. Poverty and inequality are growing rather than shrinking – with vastly different experiences depending on where people live in the city.

At the same time, the city's environmental footprint is immense and is contributing to ecological breakdown.

London needs a better way of thinking and talking about its economy. One that could allow the city and all its people to thrive and a more optimistic future for the planet – recognising that these are connected.

The London Doughnut Economy Coalition is a group of volunteers who have come together to communicate a better vision for London – one that is fair, green and also exciting!

The need for action is urgent and the evidence is stark. Without embracing new ways of working and thinking, our city will become more unequal and more fragile in the future.

All stakeholders that form part of London's fabric will have a role to play in transforming the city for a regenerative, equitable and resilient future – including government, business and financial institutions, civil organisations and universities, and of course Londoners ourselves.

This City Portrait explores how we could do that.

OVERVIEW

The Challenge

London is one of the world’s great cities. Yet the way it runs – its economy – is failing many of its residents while damaging the planet. Almost one in four Londoners lives in poverty (more than 2 million people); and inequality in the city is rising. At the same time, London’s environmental footprint is immense, overshooting nearly every planetary boundary.

The Framework

The London City Portrait applies the Doughnut Unrolled framework, developed by Kate Raworth and the Doughnut Economics Action Lab, to London. It explores how its economy could shift in order to allow all Londoners to thrive within a social foundation that meets the needs of a good life, while respecting the ecological ceiling set by the earth’s natural systems and finite resources.

We have examined London through the Doughnut’s four lenses: Local Social, Local Ecological, Global Ecological, and Global Social. Each of these provides a different perspective on how London performs against the critical human and environmental dimensions, both locally and through impacts across the world.

Key Findings

When it comes to supporting a good life for all its people, London falls short on 12 of 15 indicators we have examined. Around 183,000 Londoners are homeless, including 90,000 children. Food bank usage continues to rise, in-work poverty is widespread, and the poorest 50% of Londoners hold only 4% of the city’s wealth.

London is a relatively green city, but the environmental impacts of London’s economic activity exceed its fair share of what the planet can support on nearly every indicator. Its carbon

emissions overshoot the per capita boundary by an estimated 5.5 times; freshwater use by 2.6 times; and nitrogen flows by nearly double.

As a global hub, London’s influence through trade, investment, migration and policy decisions has social and ecological consequences for people and communities around the world. Many of these impacts remain poorly accounted for and inadequately governed.

Policy Context

Many policy objectives of the Greater London Authority and the Mayor of London show ambition to address London’s challenges. This is positive. At the same time, there is still much work to do to create a city and economy that truly work for people and planet.

Some steps that would help include adopting a city-wide social foundation framework, integrating global dimensions into London’s environmental strategies, and mobilising London’s financial sector as a steward of planetary health and social development.

The Call to Action

The City Portrait offers pointers towards designing our economy for the goals that matter most. Some of these are already reflected in policy while some are nascent and need further refinement. We call on government, businesses, financial institutions and London’s civil society to take conversations forward into action – to create an economy that supports a good life for people here and everywhere, respecting what the planet can support.

London has the tools, the talent and the influence to lead. This City Portrait provides the evidence base to begin that work.

LONDON IS FALLING SHORT ON 12 OUT OF 15 SOCIAL FOUNDATIONS OF A GOOD LIFE. AROUND 183,000 LONDONERS ARE HOMELESS, INCLUDING 90,000 CHILDREN. IN-WORK POVERTY IS WIDESPREAD, AND THE POOREST 50% OF LONDONERS HOLD ONLY 4% OF THE CITY’S WEALTH. THE CITY’S IMPACTS ON THE ENVIRONMENT ARE MASSIVE, CONTRIBUTING TO ECOLOGICAL BREAKDOWN.

WHAT IS DOUGHNUT ECONOMICS?

Doughnut Economics is a different way of thinking about how our economy works, how we relate to each other as humans and how we interact with our environment. It envisions a world in which all people and the planet can flourish in balance with each other – it is a compass for guiding 21st century prosperity.

The Social Foundation

The Doughnut’s **social foundation** is derived from the social priorities in the United Nations’ 17 Sustainable Development Goals. It sets out

the minimum standard of living to which every human being has a claim. No one should be left in the hole in the middle of the Doughnut, without the foundations of a good life. These include the most basic needs such as access to good water and food, as well as education, health support, and decent work and social networks. All the social foundations are supported by essential institutional bedrocks such as peace and justice.

The Ecological Ceiling

The Doughnut’s **ecological ceiling** is made up of nine planetary boundaries for the Earth’s critical life-supporting natural systems. These systems include a stable climate, fertile soils, healthy oceans, a protective ozone layer, ample freshwater and abundant biodiversity on Earth. All of these must be in sufficient balance to remain healthy and safe – now and for future generations.

The safe and just space of the doughnut

Between the social foundation and the ecological ceiling lies a doughnut-shaped space in which it is possible to meet the needs of all people within the means of the living planet. This is the **ecologically safe and socially just space in which humanity and our planet can thrive**.

Where are we now?

The problem is: we are living far outside this space. Worldwide, billions of people still cannot meet their most essential needs, yet humanity is overshooting many of the planetary boundaries, and is heading towards climate breakdown and ecological collapse.

Here in London, one of the world’s richest cities, many Londoners find themselves missing critical

social foundations and our city is home to huge inequalities which are steadily growing. London also has substantial impacts on the environment both locally and on a global scale – far beyond the planet’s ability to regenerate the natural resources that we rely on for every aspect of life.

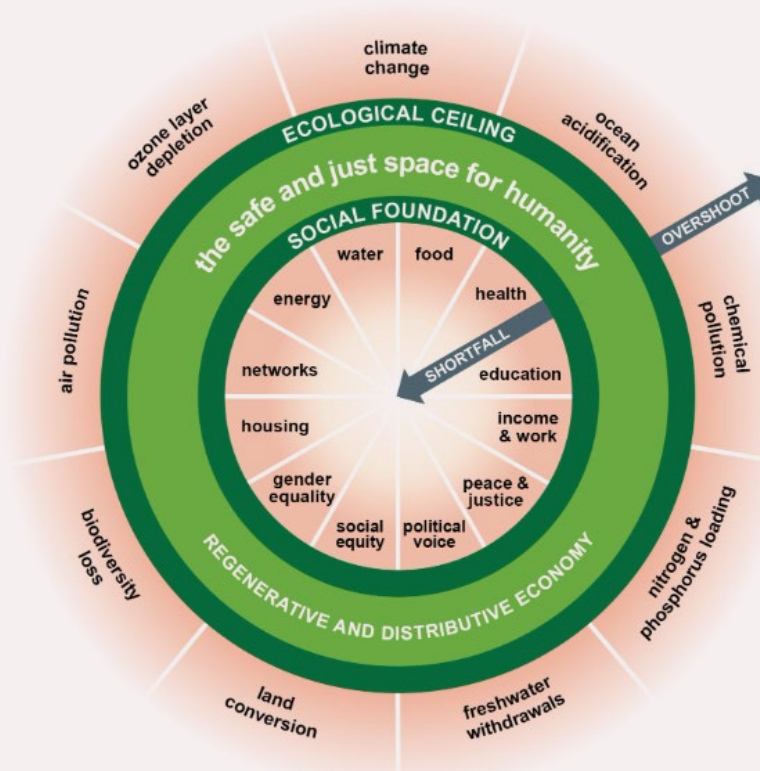
A key insight of Doughnut Economics is that all of these questions are connected. One third of the city living in poverty; the loss of biodiversity in London’s region; the global impact of London’s emissions and the impacts on the rest of the world financial decisions made in London.

All of these are connected and need to be considered together – and that is what the City Portrait helps us to do.

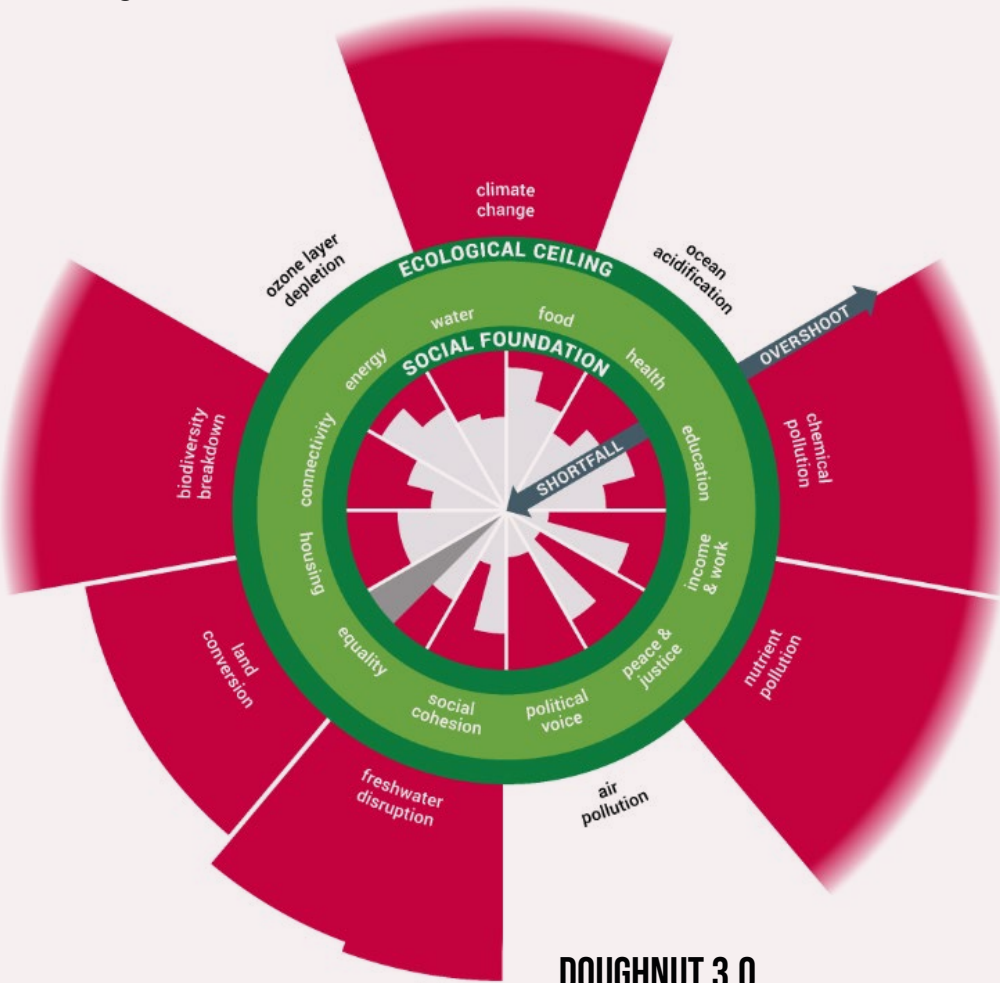
THE EVOLVING DOUGHNUT



DOUGHNUT 1.0



DOUGHNUT 2.0



DOUGHNUT 3.0

WHAT IS THE CITY PORTRAIT AND WHAT CAN IT OFFER LONDON?

The City Portrait examines where the city stands on the critical points that support flourishing people and planet, and considers pathways towards positive change.

It is based on the City Portrait and Doughnut Unrolled methods, developed by the [Doughnut Economics Action Lab](#) (DEAL) and inspired by Kate Raworth's book Doughnut Economics.

Groups similar to ours around the world have created Portraits for their cities, towns and local areas. The City Portrait method is designed to bring out the points that are particular to each place and rooted in its history and identity, while setting them in the context of a wider set of data on the most important social and ecological questions and their links to economic systems.

The City Portrait runs through a set of topics which are essential for understanding these questions:

- **London's "canvas"** – London's context and the groups of actors and changemakers that make up the city
- **London's policies and plans** – London's social and environmental policy landscape how it relates to economic policies

- **The four lenses** – drawn from the Doughnut Unrolled method, these consider London's status across key social and ecological questions from both local and global perspectives and make suggestions towards positive change. Our recommendations are at a high level and aim to build on existing work across sectors and stakeholder groups.

This is the second version of the London City Portrait. It builds on the first Portrait which we published in 2022. Since then, we have had time to expand our thinking and engage with others around a path for London.

We hope that the City Portrait can spark new conversations for London and Londoners – offering a foundation for discussions around new economic strategies for the city and its boroughs, and helping local changemakers to make positive impacts in their neighbourhood, the city and the wider world.

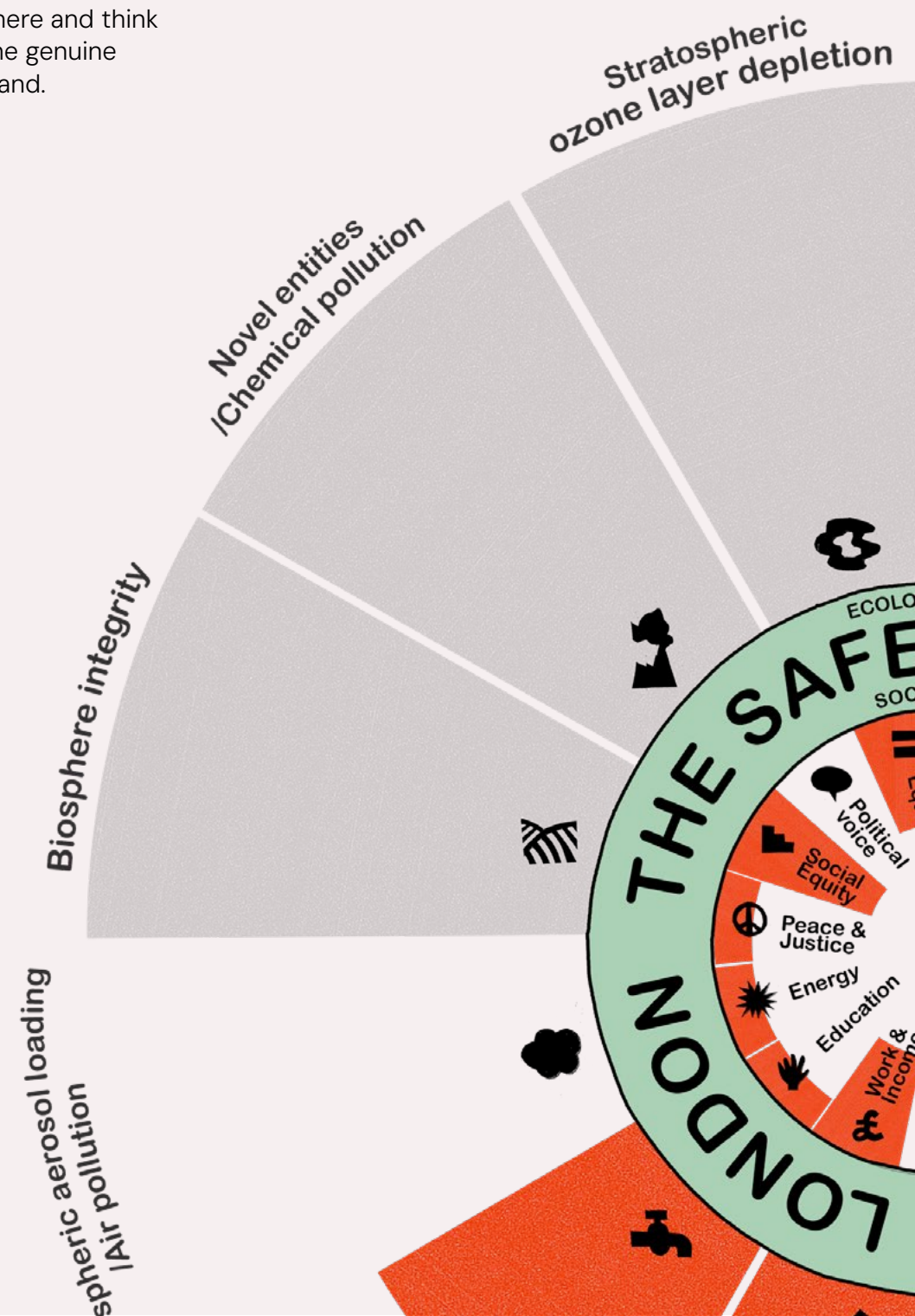
The premise of our call to action is that every person in London should be entitled to a minimum standard of living (the **social foundation**) and that the city needs to operate within defined environmental limits (the **ecological ceiling**). This is known as "**the safe and just space**".

Underperforming on social foundations harms Londoners' wellbeing and threatens the social contract which makes London a great city. Overshooting our ecological ceiling means we continue to destroy the environment, creating worsening conditions for current and future generations of Londoners as well as people around the world.

London is one of the world's most important financial hubs. Decisions made here have impact across the UK and the world. Few cities have such an ability to directly influence local wellbeing and planetary health at every level.

Our aim is to unlock London's potential to deliver society's needs within the planet's limits. There needs to be a deep and honest conversation about London's economy and the impact it has on the planet.

This City Portrait is designed to provoke this discussion with good evidence. We invite different groups, individuals and institutions to engage with the information here and think about what they can do to be the genuine changemakers these times demand.



LONDON'S DOUGHNUT

This is our map of London's Doughnut.

The inside bars show our assessment of the 15 social foundations in London (the Local Social lens) and the outside bars show our calculations of London's impacts on the world's ecological ceiling (the Global Ecological lens).

The green circle represents the safe and just space inside the Doughnut.

There is an element of judgement in transposing the data to a diagram and we have tried to reflect the real need felt in our city keeping in mind the relative wellbeing of others falling short around the world.

Where red bars track in the middle of the green hoop, this means that we are falling short of the Doughnut's social foundation on the relevant indicator. Where red bars expand outside the green hoop, this means we are overshooting the Doughnut's ecological ceiling for planetary systems on the relevant indicator.

We can see that London is outside the safe and just space on nearly every indicator.

It is falling short on 12 out of the 15 social foundations of a good life for all its people, and is overshooting on all the ecological indicators that we have been able to calculate except for air pollution (the three ecological indicators in the grey bars are not calculated).

The indicators are explained in more detail as we go through the City Portrait. We chose to use the 12 social foundations in Doughnut Economics Action Lab's Doughnut 3.0, as well as three indicators (culture, mobility, social equity) which we decided to retain from the first London City Portrait due to their relevance and resonance for London.

Bringing London inside the Doughnut is essential to create a safe and just space for people and planet.



HOW WE WANT TO USE THE CITY PORTRAIT

We believe that the purpose of data is to inform action.

In the City Portrait, we make recommendations for action from various stakeholder groups. We have focused on broad recommendations rather than detailed targets – firstly because in many areas setting targets involves a large amount of complexity which needs more work, and secondly because we believe that target setting should be a collaborative process involving different stakeholder groups.

For London Doughnut Economics Coalition, the City Portrait is a key document enabling our mission to **unlock London’s potential to deliver society’s needs within the planet’s limits.**

The City Portrait supports our three strategic objectives in the following ways (see table opposite).

We hope that other stakeholders will find the City Portrait useful too. For example:

A political stakeholder may use the Portrait to better understand their area and create new narratives which link together the social fabric of the city and ambitions for London to live within its environmental limits, moving beyond growth at the expense of all else. These questions matter to the electorate: the British Social Attitudes Survey shows 68% of people nationally are concerned about poverty; and according to the Survey of Londoners, 90% are motivated to tackle climate crisis.

A financial institution can use the Portrait to engage clients on how London’s ecological overshoot in air pollution and carbon emissions translates into regulatory tightening and higher operating costs for polluting industries. Coupled with data on housing shortfalls, they could position investments in affordable, low-carbon housing as both socially necessary and commercially attractive, shifting the narrative from ESG (Environmental-Social-Governance) or an ethical checklist to core financial resilience and business opportunity – which is what these investments truly are.

As we use the City Portrait in our work and as (we hope!) other stakeholders refer to it to inspire action, we will continue to learn more about how London might move into the safe and just space, inside both the social foundations and the ecological ceiling for its own territory and for the planet. We will include these learnings in future iterations.

Our three strategic objectives	How we work towards our objectives	How the City Portrait helps us to do this
LDEC influences decision makers	We increase the number of decision makers in London working to meet the needs of society within the planet’s limits.	The City Portrait helps us to do this by providing a clear and structured evidence base, a framework for diagnosing problems and a simple vision for positive change. This provides a ready reference point for conversations with decision makers. Through these conversations, we aim to support integrated decision-making and a learning process for us all around how complex systems change can be achieved.
LDEC changes the narrative	We shape stories which generate enthusiasm around a shared re-evaluation of value and economic success in London.	The City Portrait helps us understand who we need to speak to and engage with, and the kinds of messages that we should be giving them. It also provides the quantitative and qualitative data and theoretical framework for the stories and business cases we will use to change London’s narrative.
LDEC co-creates real-world change	We work with others to put good ideas into practice, and make good practice mainstream.	The City Portrait helps us to understand where challenges are, their causes and how they relate to other challenges in a holistic way. This informs goals for making real-world change, which in turn brings opportunities to improve our analysis based on insights from work on the ground.

LONDON'S CITY PORTRAIT



LONDON'S CANVAS

A portrait of London has many layers, and its canvas connects complex networks through the city and beyond.

London is the United Kingdom's capital and biggest city. The country's government and many of its largest companies are based here.

It is also considered a nexus or "alpha" city on the world stage – one of a small group of cities whose institutions, service hubs and professional capabilities mean that they have a critical systemic role in the global economy.

So, what happens in London doesn't just make a difference here. The city's impacts and influence spread across the world through global networks and systems.

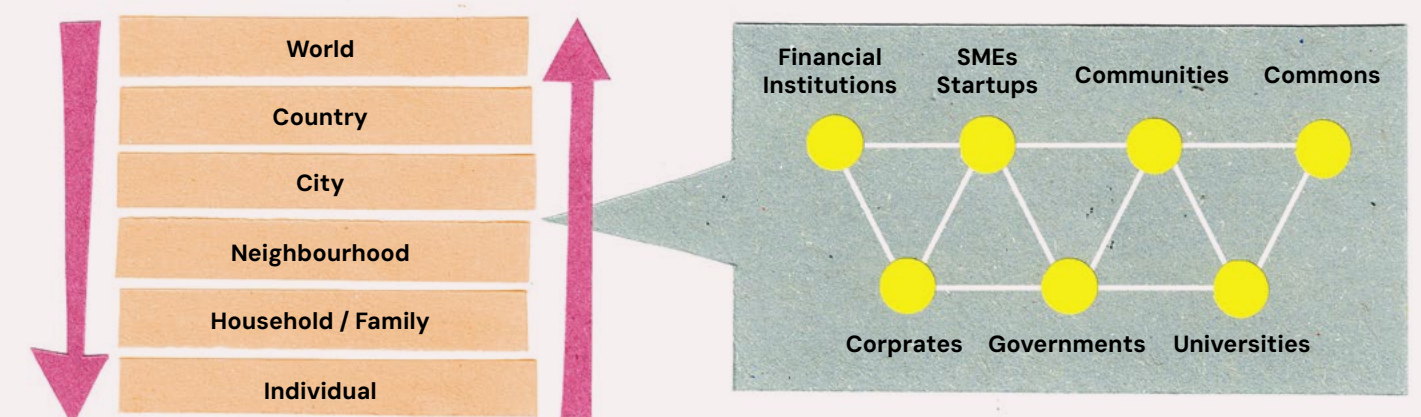
In its governance, London is made up of 33 local councils, which oversee many essential services such as education, housing and waste collection.

The Greater London Authority, headed by London's elected mayor, oversees critical services and policy areas at the city level, including transport, emergency services and strategic planning.

London falls under national policies and laws of the UK, some of which align with global frameworks such as the Paris Agreement on Climate Change, the Global Convention on Biodiversity and the Universal Declaration of Human Rights.

Each of the 9 million people who call London home is connected to the others and the wider world through their work, community and family relationships, and friendships.

Moving London into the Doughnut will mean changes at all of these levels. Every person and every group, who together make up the city's fabric, will have a role to play.



LONDON’S POLICIES AND PLANS

The Greater London Authority has developed policies around many areas which relate closely to London’s ability to stay within the safe and just operating space inside the Doughnut. We refer to the most relevant policy documents here. Two of these have not changed since the first London City Portrait was published in 2022.

The [London Environment Strategy](#) and [All of Us: The Mayor’s Strategy for Social Integration](#) were both published in 2018. [The London Plan](#) was published in 2021 and perhaps most relevant of all, [The London Growth Plan](#) was published in 2025.

These documents show the GLA’s willingness to take an integrated approach towards the city’s development, and London’s Mayor, Sadiq Khan, has stated his ambition of making London a ‘greener, fairer city’.

But the Growth Plan misses an opportunity to embrace the ideas of social foundations and planetary limits which have been adopted by other cities.

Whilst it rightly flags London’s growing inequality and the need to tackle climate change, it sets a route map which is dependent upon economic growth and does not consider a scenario where London and Londoners can thrive if that growth doesn’t materialise. In the current context, this presents a risk.

We believe that the City Portrait and Doughnut Economics provide a framework for understanding the synergies as well as conflicts in these agendas, and for setting direction to pursue them in a holistic way.

LONDON PLAN

The London Plan (2021) is holistic planning framework for Greater London, spanning social, economic and environmental dimensions. It sets out policies to:

- Address housing need, including affordable homes targets, using brownfield land first, and promoting design quality, inclusion, and well-being in new developments
- Promote economic growth, infrastructure and transport
- Support environmental resilience including green space, biodiversity, adaption to climate change and flood protection.

The next iteration is being drafted for adoption in 2027.

London Environment Strategy	Social Integration Strategy	London Growth Plan
The London Environment Strategy (2018) sets a range of targets looking towards 2050. It effectively recognises the environmental ceiling in relation to London and sets goals in relation to carbon emissions, waste, water, energy, infrastructure and adaptation to climate change. This is positive but the Strategy lacks the political and legislative punch to support change and is essentially focused on the city and its local environment. A comprehensive approach would also consider London’s global ecological impacts.	The Mayor’s Strategy for Social Integration (2018) is the closest thing that London gets to the social foundation of the Doughnut and recognises the basic conditions which Londoners can reasonably expect in terms of equality, participation and relationships. It celebrates good practice, but again is light on the compulsion to change systems to support redistribution and empowerment in the city.	The London Growth Plan (2025) is a 10–year strategy (2025–2035), developed by the Mayor of London and London Councils. It seeks to grow productivity by 2% per year and increase the size of London’s economy by £107bn in the next decade. It also aims to increase real household income by 20% by 2035 and through boosting key growth sectors, improving infrastructure and skills, and supporting all businesses. The strategy also emphasises reducing inequality and supporting economic inclusion “so that growth benefits all Londoners”.

THE FOUR LENSES

The City Portrait trains four lenses on London. These reflect the Doughnut’s social foundation and ecological ceiling, which are considered from perspectives inside the city itself and of the city’s impact on people and the environment across the world.

Each lens asks one fundamental question, examines the evidence of where we are now, and makes suggestions towards how the question can be answered.

In this, the main part of the City Portrait, we set out the key data points and takeaways for each lens.

For people who want to see more, more detailed discussion on the data for each lens is included in the “Data in detail” section at the end of the Portrait.

LOCAL

GLOBAL



THE LOCAL SOCIAL LENS HOW CAN ALL THE PEOPLE OF LONDON THRIVE?

When compared to many other cities and countries around the world, London is wealthy, with an established benefit system and good infrastructure and strong civil society.

London is a hotbed for social innovation and tackling both the causes and effects of poverty. Projects like the Felix projects, which bring nutritious food that would otherwise go to waste to where it is needed; Camden Council's Child Poverty Taskforce; Newham's pioneering work on food; and Haringey's SoloHaus response to homelessness are a few of many hundreds of great responses to London's inequality.

London also benefits from access to excellent data and analysis, providing an understanding of the geographic and demographic disparities in the city. The Local Social lens is the place where we are most able to benefit from the insights and understanding this offers.

The challenge for London is around overall trends and direction of travel. And specifically the inequality which is increasingly a defining feature of the economy. Whilst other cities and countries [are improving](#) against most local social indicators, London is now further from supporting the wellbeing of all its residents than it was when LDEC released the first City Portrait in 2022.

Around one in four Londoners lives in poverty. According to the Trust for London and GLA, this number is rising, putting roughly 2.3–2.4 million Londoners below the poverty line after housing costs. On the current trend, around 150,000

additional Londoners fall below the poverty line each year.

[Joseph Rowntree Foundation](#) identifies a set of external factors (energy, food and housing) which have driven up the cost of living and act as a barrier to Londoners achieving the basic foundations of a good life. Their analysis of severe impacts on low-income families (falls in real incomes, inability to meet unexpected costs, arrears, and very deep poverty) warn that without policy change, poverty will remain entrenched.

Taking the four headline themes (Healthy, Connected, Enabled and Empowered) of the Local Social lens, we are able to get a clearer idea of the indicators where London should focus if it is to protect or improve its social foundation.

Healthy

[London Councils](#) estimates that around 183,000 Londoners are homeless and living in temporary accommodation (many of whom are in full time work); this group includes nearly 90,000 children. In the London Borough of Newham, 1 in every 20 residents is registered as homeless. The number of people in temporary accommodation continues to grow by around 7% per year, with the number of Londoners presenting as homeless increased by around 15% in the last available year of statistics.

In the last London City Portrait, we noted how use of foodbanks had doubled in the immediate post-Covid period. This has continued to rise, with [The Trussell Trust's](#) network in London now distributing about 455,571 emergency food parcels in the year

to March 2025. In [Hackney](#), foodbank usage has increased by 287% in the last 5 years.

Connected

Connectivity in London is good and improving. Notwithstanding the cost, most Londoners have access to good public transport and initiatives like the Superloop and Hopper Fairs make it possible to travel around the city. Digital connectivity has improved significantly in the last two decades, with few Londoners truly digitally excluded.

Social connection is more of a challenge, with 27% of Londoners reporting that they experience loneliness and over 700,000 experiencing severe loneliness. This trend is an area where more of the population are falling below what we might feel is an acceptable foundation, and a trend towards declining social connection is one notable point where London's trend is more negative than the rest of the world.

Enabled

The [GLA](#) itself recognises that the traditional model of work to support London's social foundation no longer applies and that we need a new approach. Employment no longer guarantees security for many Londoners: in-work poverty and precarious, low-paid work have been persistent features.

London's labour market remains relatively strong on headline employment, but a large share of people in poverty are working households – driven by low pay, insecure hours, and very high housing costs that erode take-home income. The latest release of the [Indices of Multiple Deprivation](#) shows that London is now the most income deprived city in England, reflecting the impact that affordability is having in the city, even for those who are in work.

Empowered

The impact of cost of living and housing crises have meant that social inequity is increasingly

a defining feature of the London economy. Significant proportions of the population are excluded from the economic success of the city; the poorest 50% of Londoners now control only 4% of the city's wealth.

Inequality is increasingly translating into distrust of politics and institutions, with only 3% of Londoners saying that they support politicians, with participation in elections declining at every election. This undermines public consent for governance, institutions and the democratic process.



A FOCUS ON THE NEXT GENERATION OF LONDONERS

A number of trends in the Local Social lens show a negative direction of travel. In this context, it is important that we consider the specific circumstances for younger people in the city.

Children are more likely to live below the poverty line and the child poverty rate in London is increasing. [GLA data](#) estimates that 35% of London's children living in poverty. This is as high as 47% in Tower Hamlets.

The number of children in poverty in working households has also grown. Amongst households with at least one parent in work, the number of children in poverty in London rose by about 32% from 2010 to 2023 – from around 397,500 to around 523,700 children.

Whilst educational attainment at GCSE is better than other regions in the country, the gap to disadvantaged student performance is growing. Childhood health outcomes in London are poorer than the rest of the UK, with childhood obesity a particular concern. 24% of Year 6 students in London are classified as obese, compared to 22% in the rest of the country.

WE RECOMMEND

We should use data around the local social lens to recast economic value in the city, identifying the important public and social goods (housing, food, energy, social connections) and seeking to decouple these from solely growth-focused measures of success such as Gross Value Added (GVA).

London should adopt a whole-city approach to the defining a social foundation. This should explicitly seek to define where Londoners fall below the foundation, enabling further investigation and enquiry at local levels.

More neighbourhoods should be supported to follow the example of Brixton and Old Kent Road to develop their own citizen-led approaches to defining a social foundation, through the Local Social lens. The principles of the Doughnut can be used to support new national objectives for neighbourhood governance and more local services.

Recognise the importance of London's 600 designated high streets to the city's economic identity and the connection of the economy to the daily lives of Londoners. Evolve a new value proposition for high streets which, elevates the social functions of place above transaction, profit and land value.

Evidence suggests that London's young people are facing many barriers to prosperity. The lack of provision for young people is becoming a self-fulfilling prophecy. To address the deteriorating conditions for young people, we believe London should sign up to the UN Declaration on Future Generations. The Declaration is "a global commitment to integrate long-term thinking and the interests of future generations into present-day policies, plans, and actions."

LONDON'S LOCAL SOCIAL DOUGHNUT

This image maps London's social foundations, using the 12 social foundations in Doughnut Economics Action Lab's Doughnut 3.0, as well as 3 indicators which we believe are relevant to London: mobility, culture and social equity.

The size of the red bar for each social indicator indicates how far below the social foundation London stands if we look at the available data holistically and take account of the city's inequalities.

There is an element of judgement in transposing the data to a diagram and we have tried to reflect the real need felt in our city keeping in mind the relative wellbeing of others falling short around the world.



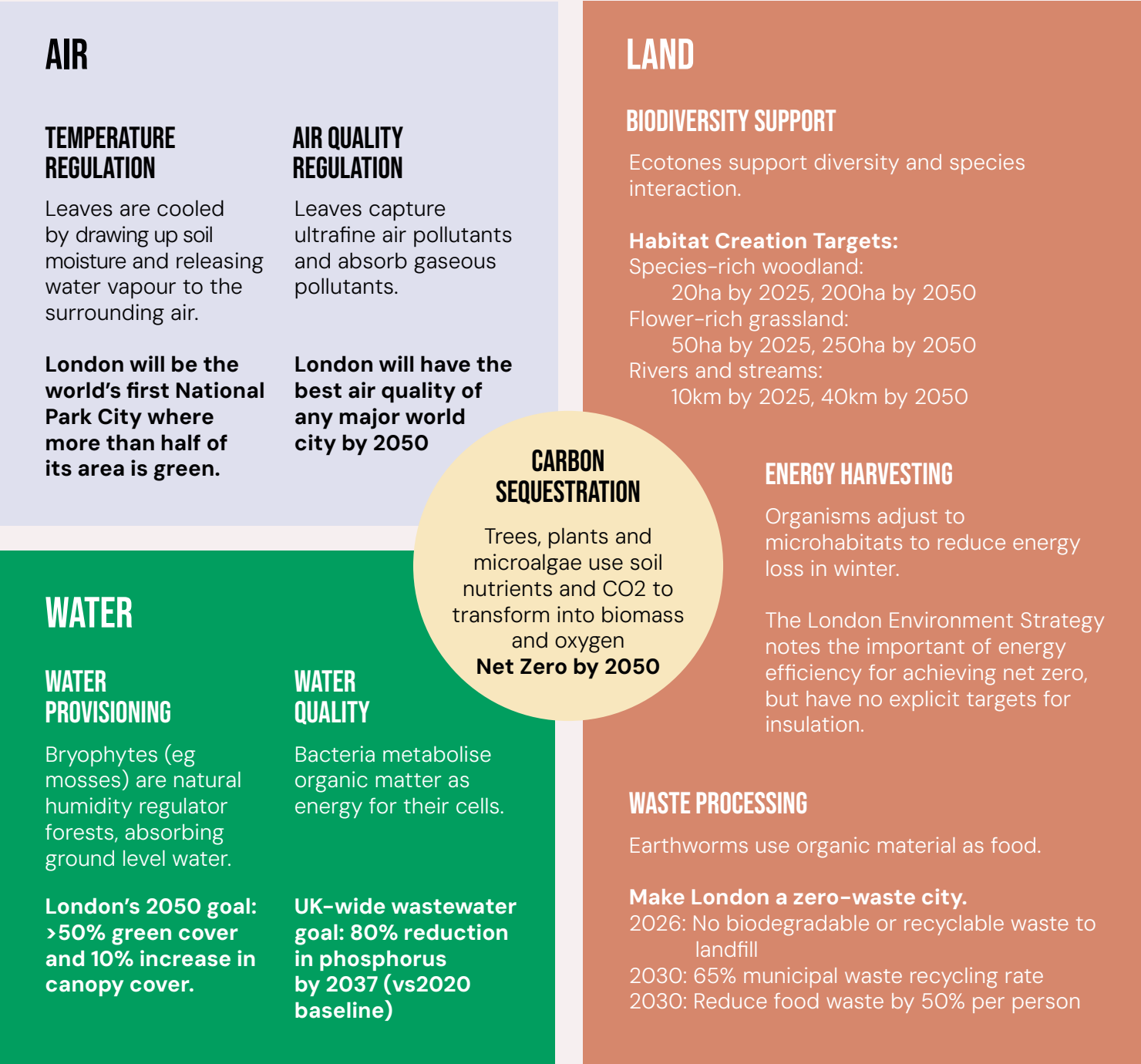
THE LOCAL ECOLOGICAL LENS HOW CAN LONDON THRIVE WITHIN AND SUPPORT ITS NATURAL HABITAT?

Although London is a mostly urban environment, it is a relatively green city compared to many peers. The city holds over 8 million trees, and the whole London administrative region includes substantial areas of farmland, woodland and wetlands, as well as smaller areas of grassland, heath and coastal habitats.

London’s natural habitats supply a range of **ecosystem services** to the city and its immediate environment, including provisioning of fresh water, and regulation of air temperature, air pollution and greenhouse gases. Despite this, the city still faces poor air quality which impacts the health of its people.

As the climate warms, London is at greater risk from extreme heat and its habitats risk becoming destabilised. Weather patterns will also be more extreme and unpredictable, meaning that London is at risk from both water shortages due to drought and flashfloods due to sudden and intense rainfall.

London has a comprehensive Environment Strategy which was produced by the Mayor and Greater London Authority in 2018. It includes plans to improve the condition of London’s habitats, reduce the city’s carbon emissions and waste footprint, support biodiversity and adapt to climate change.



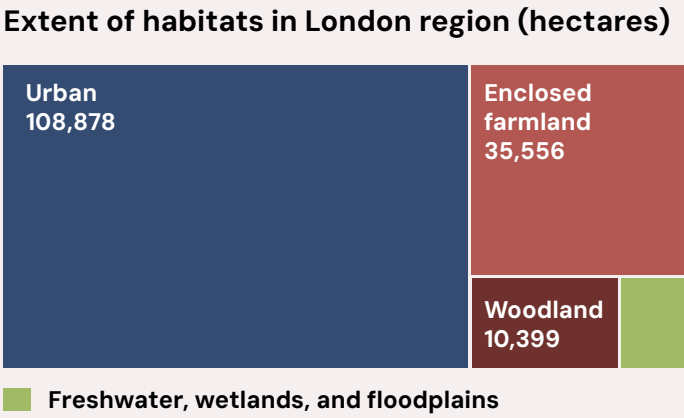
The Strategy notes the role of nature-based solutions in allowing London to support its social and economic goals through protecting and improving its natural environment. The fourth progress report of the Environment Strategy was released in 2024. However, we did not find comprehensive environmental data in one source since 2017.

The Local Ecological lens: snapshot
Here we note some key ecosystem services that nature supplies, and link them to the relevant goals in the London Environment Strategy. We look in more detail at London’s ecosystem services in the “Data in detail” section.



These charts show the extent of different habitat types in the London administrative region, according to the UK Natural Capital Accounts. While urban land dominates, there are substantial areas of farmland, woodland and water-adjacent land.

Habitat	Extent (ha)*
Coastal margins	25
Enclosed framland	35556
Freshwater, wetlands, and floodplains	4,494
Marine	9
Mountains, moorlands, and heath	53
Semi-natural grassland	52
Urban	108,878
Woodland	10,399
Total extent	159,466



WE RECOMMEND

That the GLA and Mayor develop a refresh of the London Environment Strategy by 2028 at the latest, to ensure that it stays on track and accountable to Londoners for progress in improving London’s environment.

That the refreshed strategy includes updated material on the uses and value of the ecosystem services supplied by London’s natural capital assets, and the role of nature-based solutions in supporting healthy urban environments, climate change adaptation, contribution to economic development etc. This will reflect advances in knowledge since the current strategy’s publication in 2018 and climate change impacts anticipated over the coming century.

That London’s financial strengths are mobilised as a core enabler of environmental outcomes by mobilising capital through green bonds, blended finance and public private partnerships to fund ecosystem restoration and climate adaptation; by improving frameworks that track environmental outcomes of financial flows; and by supporting investments that link ecological health to Londoners wellbeing.

THE GLOBAL ECOLOGICAL LENS HOW CAN LONDON RESPECT THE HEALTH OF THE WHOLE PLANET?

This lens looks at the impact of London’s economy on the world’s critical environmental systems, with reference to the **planetary boundaries** which mark how much disruption to these systems can be considered safe.

The data here is mostly “consumption-based” – which means that it includes the impacts associated with goods and services that people in London use which are made in different places, not just those which are produced in London.

Looking at this data, we see that London is severely overshooting its boundaries across nearly all dimensions.

The city accounts for nearly twice the safe usage of nitrogen and phosphate fertilisers, and overshoots the safe boundary for carbon emissions by more than five times. It also has a material footprint which is disproportionate to its size, and an even larger overall ecological footprint. (The definitions of these footprints and the relevant planetary boundaries are explained in the “Data in detail” section at the end of the Portrait.)

Although this situation is typical for cities in richer countries, it is not tenable.

London’s impacts on the global environment are disproportionately contributing to breakdown of the planet’s systems, and the city needs to reduce them urgently.

London’s environmental impacts (consumption-based except land-system change)	Planetary boundary overshoot (number of times above the boundary)
Climate change (due to carbon emissions)	5.5
Ocean acidification (due to carbon emissions)	5.5
Material footprint	1.1
Ecological footprint	2.2
Biogeochemical flows (Nitrogen)	1.9
Biogeochemical flows (Phosphate)	1.2
Land-system change (Woodland)	2.8
Freshwater use (Blue water)	2.6
Atmospheric aerosol loading / Air pollution	0.6
Biosphere integrity	No Data
Novel entities / Chemical pollution	No Data
Stratospheric ozone layer depletion	No Data

Although London’s Environment Strategy includes a pathway for reducing the city’s carbon emissions, progress against this pathway needs to be tracked and reviewed.

The Strategy also sets an aspiration to move towards a circular economy. This transition is needed to reduce London’s material and ecological footprints, which reflect the extraction of minerals, biomass and land use change associated with the city’s supply chain and its food supply. Again, progress needs to be tracked and momentum maintained.



WE RECOMMEND

That a refreshed London Environment Strategy include goals around reducing London’s global environmental impacts to levels in keeping with the safe operating space inside the planetary boundaries. A key plank for achieving this will be for the London Mayor, local authorities, TfL and other associated bodies to successfully complete the electrification of London’s heating and transport systems by 2035 and promote the use of sustainable energy sources for powering London. Other critical points include addressing the impacts of London’s food supply and other supply chains to reduce their impacts and nature and biodiversity.

That the Strategy should adopt a comprehensive framework for metrics and targets, reflecting all the planetary boundaries and with clear mapping of environmental impact pathways and how impacts can be reduced.

That the Strategy makes clear the links between London’s local and global environmental impacts, and their links to economic patterns and other global systems and London’s role in those.

That the strategy highlights the role of the Finance sector as a steward of planetary health and commercial resilience by mobilising capital to reduce resource intensity across supply chains; investing in circular economy solutions and sustainable product design; shifting portfolios toward low-carbon and resource-efficient sectors; and supporting investment in global natural capital including reforestation, soil restoration, sustainable agriculture, and marine conservation.

LONDON’S GLOBAL ECOLOGICAL DOUGHNUT

This diagram shows our calculations of London’s impacts on the world’s ecological ceiling (the Global Ecological lens).

The green circle represents the safe and just space inside the Doughnut, and the red bars indicate the degree of London’s overshoot on each

of the planetary boundaries.

London is overshooting on all the global ecological indicators that we have been able to calculate except for air pollution (the three ecological indicators in the grey bars are not calculated due to lack of usable data at present).



THE GLOBAL SOCIAL LENS HOW CAN LONDON RESPECT THE WELLBEING OF ALL PEOPLE WORLDWIDE?

In the “Data in detail” section of this City Portrait, we map how five critical flows (goods, services, money, people and decisions/influence) that run into and out of London have impacts on the social foundations of the Doughnut across the world.

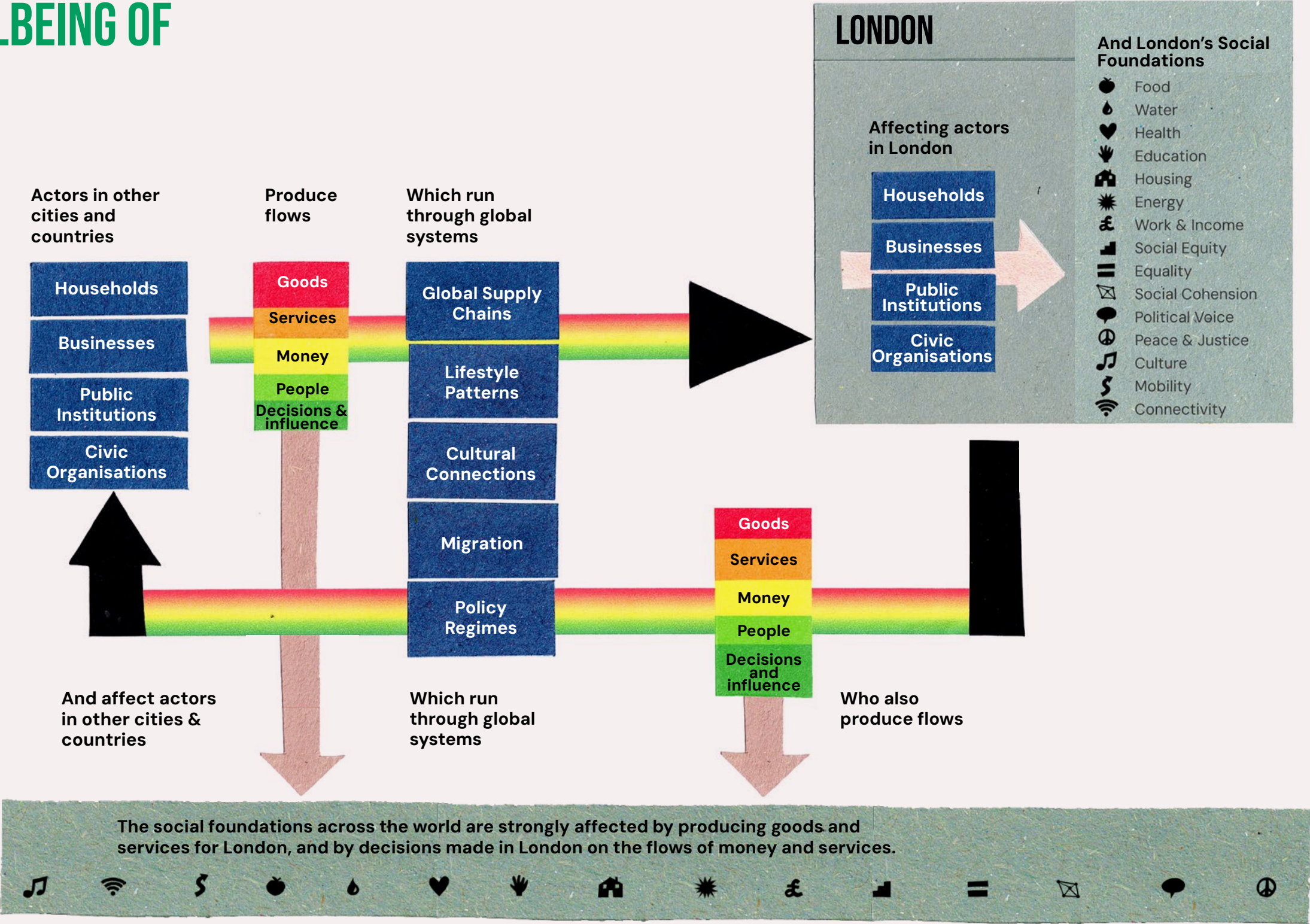
The social foundations are: **food; health; education; income and work; water and sanitation; energy; connectivity; housing; equality; social cohesion; political voice; and peace and justice.**

These are set out together with indicators in Kate Raworth’s recent (October 2025) paper The Evolving Doughnut, published by the Doughnut Economics Action Lab (DEAL); and in the “Data in detail” section of this City Portrait.

The most critical of London’s global social impacts for policymakers and other institutional actors are:

- The impacts of the raw materials and processes used to produce goods, including food, that London consumes
- The impacts of services produced in London
- The impacts of money invested from London
- The impacts of London’s systemic role as a global hub city.

For London to respect the wellbeing of people worldwide, it is essential to understand the city’s role in global systems; and to develop policies, trade and investment models, and social connections which support rather than undermine social foundations across the world.



WE RECOMMEND

That the GLA and other policymakers:

Continue to develop and refine models for quantifying and evaluating the social impacts of goods and services that London imports and exports, building on models such as consumption and production-based approaches for accounting for carbon emissions and docking into national accounting frameworks.

Engage with central government and other actors around the capital's role in national trade, economic and foreign policies which support positive outcomes for the social foundations globally, with reference to the targets under the relevant UN Sustainable Development Goals.

Initiatives such as the UK Green Finance Strategy, the Transition Plan Taskforce (TPT), the British Investment Bank agenda, and evolving ESG and green taxonomy frameworks aim to drive investment in affordable housing, green infrastructure, circular economy solutions, and global sustainability frameworks. Working with the finance sector to embed these into London's strategies will allow the GLA to leverage finance as a core driver of social and ecological transformation both inside the city and across the world.

That actors in London's financial system:

Plan a solid track to phase out investment in new oil and gas, in line with a pathway not exceeding 1.5C global temperature rise.

Continue to develop and refine approaches such as Environmental-Social-Governance (ESG) frameworks which can effectively assess the social impacts of investments, financial products and financial services.

Continue to develop and refine approaches which will steer capital towards investments and outcomes which support the social foundations globally, building on frameworks such as the proposed UK Green Taxonomy.

That businesses operating in London:

Continue to adopt up-to-date frameworks for understanding the global social impacts of their upstream and downstream value chains (in other words, their supply chains and their sold products & services respectively).

Adopt approaches for purchasing and procurement which as far as possible support positive social impacts and reduce negative social impacts in their supply chains.

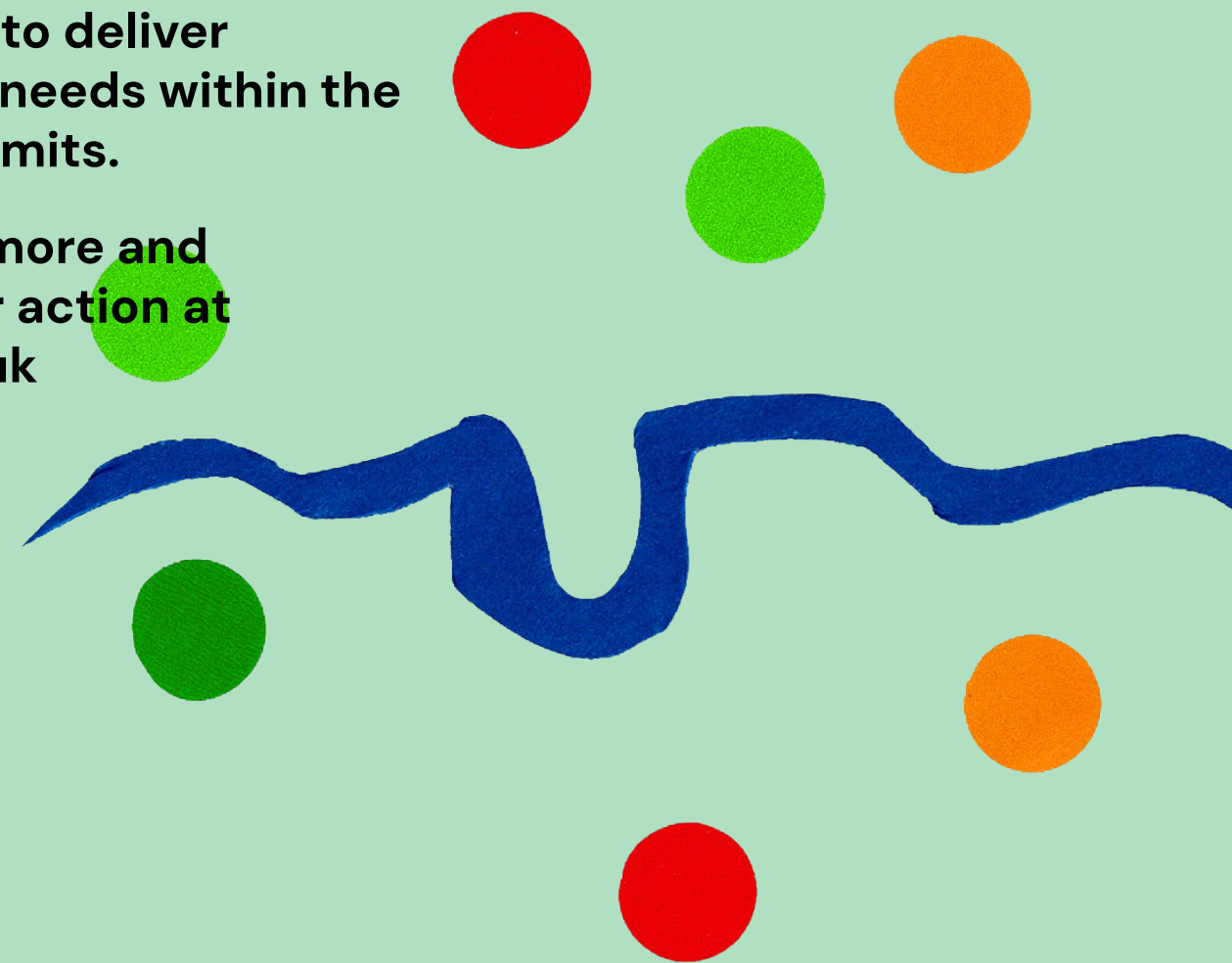
Adopt approaches for assessing the downstream impacts of their sold products & services and, where appropriate, supporting continuous improvement of these to support positive social outcomes.



JOIN US FOR A BETTER FUTURE FOR LONDON

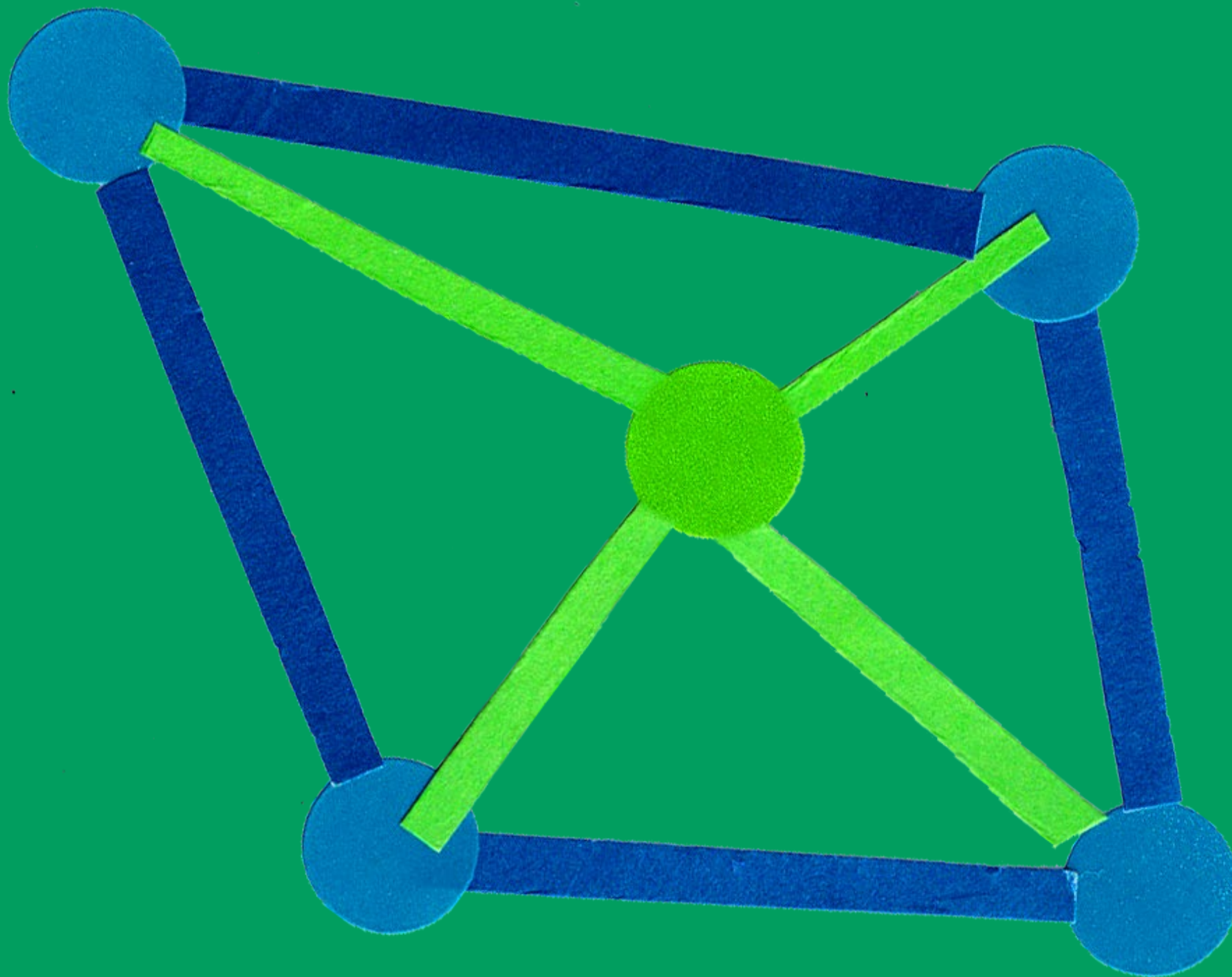
If London's City Portrait has made you feel interested, inspired, angry or curious, join us! We are group of volunteers who have come together to communicate and create a better vision for London. We welcome people with ideas and energy to share around how to unlock London's potential to deliver society's needs within the planet's limits.

Find out more and
join us for action at
Idec.org.uk



DATA IN DETAIL

In this section – the last of the City Portrait – we provide more detailed discussion of the Four Lenses and the approaches we used to analyse them, for those who want to explore further.



HOW WE CREATED THE CITY PORTRAIT

The London City Portrait is one of many city portraits that have been created by the Doughnut Economics Community around the world, which are brought together on the [Doughnut Economics Action Lab](#) (DEAL) website.

This is the second version of the London City Portrait, following from the first version which was published in 2022. For the second Portrait, we have developed our methods around some of the lenses (in particular around the Global Ecological and Global Social lenses).

In this City Portrait, we aim to strike a balance between presenting data and analysis that both reflects the richness and complexity of the topics in question while also keeping things concise and approachable.

This is a challenging task! Our analysis is still a work in progress and there are many areas where we hope to improve this to provide clearer pointers for action in future versions.

Each of the Portrait’s four lenses has been investigated in detail by a member of London Doughnut Economics Coalition’s Insights Group, building on material in the first London City Portrait and where data and methods have developed since 2022.

These have been fused into our overall analysis with reference to a range of other sources. The sources that we drew on for material, data, methods and advice to develop the second City Portrait include:

Material	Data	Methods	Advice and feedback
London City Portrait v1	- Published data - Published policy documents and strategies for London	- Doughnut Economics Action Lab (DEAL)’s Doughnut Unrolled Methodology and other materials available from DEAL - Other City Portraits published through DEAL	- Interaction with DEAL’s core team - Interaction with Doughnut Economics communities in other cities - Inputs and feedback on key questions from around 50 participants at London’s Global Doughnut Days in November 2023 and 2024
↓	↓	↓	↓
London City Portrait Version 2			

LOCAL SOCIAL LENS

UNDERSTANDING LONDON'S LOCAL SOCIAL PROFILE

The local social lens is perhaps the best researched, with a wealth of information and primary research to supplement the excellent government data. General sources such as [Data for London](#) and more bespoke data sources such as those provided by [Trust for London](#), [Runnymede Trust](#), [Sustain](#), [Sutton Trust](#) and [Joseph Rowntree Foundation](#) (amongst many others) all help to tell the story of London and its social and economic conditions, which are characterised by high levels of inequality.

It is well established that London has the highest rate of poverty in the country once housing costs are taken into account. Policymakers and commentators often fail to capture the nuance which lies behind this fact, tending to default to blunt data such as the Indices of Multiple Deprivation, which can be inaccurate and out of date.

An assessment of the Local Social lens therefore needs to use broader range of sources with a level of agility and adaptability to:

1. Assemble the right data to establish an assessment of a local social lens comparable to other places and ideally replicable at a neighbourhood level
2. Use the doughnut as a framework to guide the questions we need to answer with evidence to inform future policy
3. Create the conditions where we can start to better blend data to tell the story of social foundations in different places and contexts.

On the following pages we set out some of the narratives and data sources which help better understand London, using the Doughnut Economics framework to aid comparisons with other cities following this approach.

The Doughnut Unrolled framework groups the 12 dimensions of the social foundation into 4 clusters for strong social foundations: healthy, connected, enabled, empowered.

The local social lens is information-dense. Although the information below provides only an indication of what might be available for the city as a whole, it should however provide the foundations for specific boroughs and neighbourhoods to better tell the story of the local social lens in our city.

In Old Kent Road and Brixton, LDEC is already supporting local people to understand what a social foundation means for them and their neighbourhood. This approach can provide the 'ground up' insights which can complement the more 'top down' data led approaches, which we aim to feed into our analysis in the future.

LONDON'S LOCAL SOCIAL DOUGHNUT

This image maps London's social foundations, using the 12 social foundations in Doughnut Economics Action Lab's Doughnut 3.0, as well as 3 indicators which we believe are relevant to London: mobility, culture and social equity.

The size of the red bar for each social indicator indicates how far below the social foundation London stands if we look at the available data holistically and take account of the city's inequalities.



DATA SOURCES

Cluster	Description of the Social Dimension (as outlined in DEAL’s Unrolling the Doughnut framework)	Interpretation and Application in London: How does this help us understand the Local Social Lens?	Useful Data for London	Current Position: Key Facts
Healthy	Health – Health services provide people with essential care and treatment for illness and injury, from birth to death as well as significantly reducing the prevalence of disease	Health is an increasingly contested space in the UK and in London. It has taken on growing importance in policy both through a focus on health equity ¹ and wider determinants, and as a result of ongoing reform of health services and the NHS. In this context, health is considered one of the key components of a social foundation.	Healthy Life Expectancies GP Data is available by practice, providing local statistics Government Health Inequality Dashboard Personal wellbeing statistics are available by borough Some boroughs have undertaken detailed work looking at wider determinants of health in their locations.	Wellbeing scores have historically been improving, but remain behind the national position. Whilst health has improved since the pandemic, there is growing disparity between boroughs. Childhood obesity is 3x higher in Barking & Dagenham than Richmond.
	Housing – Sustainable and resilient homes and settlements are foundational for creating thriving communities, and for reducing the risks that people face from natural disasters and climate change.	Housing is universally considered a human right. But there is general agreement that we are living through a housing crisis. Even when London delivers more homes, this does not necessarily mean that issues of homelessness, dampness or building safety are addressed.	GLA provides data on housing delivery and the housing market and affordable housing delivery Government provides data on homelessness at a regional level Government provides data on housing quality at regional level Shelter provides data on a borough level on homelessness and TA Institute of Health Equity has provided data and advice on links between health and housing	Affordable housing is increasing, but not by enough. According to Shelter London has 17 of the top 20 local authorities in the country for homelessness. Around 183,000 Londoners are homeless and living in temporary accommodation, over 90,000 of whom are children. ²
	Water – Water is a household essential for drinking, bathing, cooking, and washing clothes, and is also essential for agriculture and industry. The quality of water supply and sanitation systems are both fundamental for ensuring human health and hygiene.	Water is not generally perceived as an issue in London, although it is universally considered a basic human right and part of a social foundation. But there is increasing evidence that London’s water demand does not always match its capacity and that this will become more of an issue in the next two decades. The crisis at Thames Water has amplified this and shone a light on London’s water systems, with increasing recognition that this may be a barrier to the delivery of housing in the future.	Environment Agency produces regional data on water stress which enables comparisons with other parts of the UK Thames Water produces up to date detail on water resources in London	London is classified as in serious water stress Thames Water estimates that London will need at least 1billion litres of additional water per day by 2050. ³ Over one third of those surveyed by Citizen’s Advice struggled to pay their water bills. ⁴ 320,000 households in London are located in areas of flood risk. ⁵
	Food – Food is a daily essential for a healthy life, which is why all people need to have secure access to sufficient, affordable, safe and nutritious food.	Inflation in prices across the UK means that food is increasingly seen as a vulnerable element of a social foundation, particularly in London. Food and its sources also link to the other lens of the Doughnut framework and has the potential to impact on water, community, culture and health.	Re-London is actively targeting improvements to the London food system and provides a range of data across topic areas. Sustain provides a digest of data and research on food poverty and other aspects of food including on farming and supply of food in London.	There is a trend towards food insecurity with the Food Foundation suggesting the 19% of London’s Households are food insecure. The Trussell Trust Network distribution almost half a million food parcels in London.

1. <https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review>

2. <https://www.londoncouncils.gov.uk/news-and-press-releases/2025/ps330m-homelessness-overspend-housing-crisis-threatens-bankrupt-london>

3. https://www.thameswater.co.uk/news/2024/oct/thames-water-publishes-its-water-resources-management-plan?utm_source=chatgpt.com

4. <https://www.standard.co.uk/business/business-news/citizens-advice-government-people-england-defra-b1247334.html>

5. <https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/climate-change/climate-adaptation/surface-water-flooding/london-surface-water-strategy>

Connected	Connectivity – Information and communications technologies – such as mobile phones and the Internet – can provide people with critical access to information and knowledge, such as for education and public services, online banking, employment opportunities and new forms of organising.	Low digital connectivity and access to the internet is likely to impact on fewer people in a city like London. But it is important to recognise and identify the small proportion of Londoners who might be digitally excluded. As more core services which impact the social dimensions of the Doughnut move to online and AI based services it is critical that all Londoners are enabled to engage with this technology.	London Office for Technology and Innovation provides data and research on digital inclusion GLA City Intelligence Unit provides a map of access to broadband services	London digital exclusion reduced from 15% to 7% from 2012 to 2018. It has the lowest percentage of internet non-users in UK regions. According to LOTI There are still 250,000 Londoners who have no internet access and 1.6m Londoners lack basic digital skills. Specific neighbourhoods in outer London do not have access to 30MB broadband. ⁶
	Social Cohesion – Social cohesion and the support it brings is fundamental to most people's sense of wellbeing. It helps build the social cohesion needed to create inclusive and mutually respectful societies, and ensures that people feel they have others to turn to in times of difficulty.	The Harvard Longitudinal Study of Adult Development has, for 80 years, been considering what enables people to be happy. ⁷ The overwhelming finding from this work is the importance of relationships and social connection. The nature and diversity of London will mean that this will vary between places, communities and circumstances. This is an important element of a social foundation about which we need to know more..	The government produces the annual Community Life Survey which includes information on loneliness, civic participation and social action London Plus provides a range of data on volunteering and civic participation GLA published data on Social Integration between 2018 and 2022	27% of Londoners above the age of 16 suffer from social isolation (do not have a spouse, friend or family member they can rely on a lot) An estimated 700,000 Londoners feel severe loneliness. ⁸
	Mobility – Transport opens up opportunities in life, connecting people to essential services, employment and community. Infrastructure that – when possible – prioritizes walking, cycling and public transport additionally promotes health.	London has one of the best integrated transport systems in the world. An increasing number of Londoners are opting to cycling and walk as their main mode of transport. Although there are important concessionary schemes for young people and pensioners, costs can be prohibitive for some, who may be limited by an inability to afford travel.	TfL makes much of its data available for use through its Open data platform ONS provides analysis of to 2021 Census showing travel to work	Lower income neighbourhoods had poorer accessibility than higher income ones both in 2011 and in 2023, even after adjusting for car ownership and population density. ⁹ There is a correlation between lack of accessibility and deprivation in some specific neighbourhoods in East London. ¹⁰
	Culture – Cultural practices and events bring music, art and dance to everyday life, giving people pride in their community. Culture helps to build a sense of connection to others, and to the rest of the living world, through rituals, festivals and traditions, old and new.	London is one of the most dynamic cultural cities in the world. ¹¹ Both Londoners and visitors can access culture free of charge. With cultural representation encouraged and supported, it is important that participation is maintained. The rise of more populist politics could represent a challenge to this and therefore, it is important to active maintain this aspect of a social foundation for London,	The GLA produces a Cultural Infrastructure Map Arts Council England provides data for use, including on diversity and participation OMS provides recent data on participation with arts, culture, sports and events	Londoners are generally more likely to engage with arts and culture, although those living in outer London are much less likely to do so. Londoners are much more likely to use a local library than the rest of the country. 84% of Londoners think that the city's cultural scene is important in ensuring a high quality of life. (GLA/ICM research)

6. <https://apps.london.gov.uk/connectivity>7. <https://www.londoncouncils.gov.uk/news-and-press-releases/2025/ps330m-homelessness-overspend-housing-crisis-threatens-bankrupt-london>8. <https://www.londoncouncils.gov.uk/news-and-press-releases/2025/ps330m-homelessness-overspend-housing-crisis-threatens-bankrupt-london>9. <https://www.sciencedirect.com/science/article/pii/S019897152400098X>10. <https://trustforlondon.org.uk/news/londons-poverty-profile-map-of-the-month-access-to-work>11. <https://www.london.gov.uk/programmes-strategies/arts-and-culture/vision-and-strategy/20-facts-about-london%E2%80%99s-culture>

Enabled	Work and Income – Work that is safe and meaningful, with fair pay and decent working conditions, provides essential income that enables households to meet many of their needs and wants. Other sources of income – such as welfare payments, cash transfers and remittances – are likewise critical for many.	Access to work has long been perhaps the key determinant of economic identity and foundation in society. The changing structure of the labour market has changed this, which has fundamentally impacted on the role of work in the economic life of the city. The 2025 London Growth Plan acknowledges the impact of Brexit and Covid-19 on migration patterns and labour shortages, as well as the increased reliance on the gig economy. These ‘big shifts’ and the impact of AI mean that the role of work and income in a social foundation will change in the coming years and will need to be understood better if we are to support all Londoners in the future.	ONS collates a wide range of labour market and employment data . This is updated frequently and has good geographic specificity Government has provided specific research on the impact of housing costs on income Trust for London provides a range of research and insights on incomes in London. This includes specific consideration of a potential minimum income standard for London GLA provides data on UC claimants at the borough level	Proportion of workers paid below London Living Wage has declined from 19.6% to 13.6% since 2020. Outer London however, remains a significant hub of low pay. London’s unemployment rate has increased from 3.8 – 5.5 % in 2024. 280,000 Londoners are now out of work Approximately 38,000 households in London had their income reduced by the benefit cap in February 2025. This has increased by nearly 50% since before the pandemic Incomes after housing costs in London are declining and are currently around the same level they were in 2012. 16% of London’s households live in persistent poverty.
	Education – Education is foundational to every person’s ability to participate in society and to take up opportunities throughout their life.	Education has long been considered one of London’s key successes, ¹² with unparalleled improvement in the last two decades. As well as maintaining this, it is important that we track outcomes beyond their participation in formal education to ensure that this is translating into life opportunities.	ONS provides headline data on education Department for Education provides a range of detailed datasets through its Explore Education Statistics site Sutton Trust provide details on social mobility related to education through its Opportunity Index	All top 20 places in the Sutton Trust Opportunity index were London constituencies, including East Ham, Stratford & Bow, Brent West, Bethnal Green & Stepney and Bermondsey & Old Southwark. The average Attainment 8 score per pupil is 21.1% lower for pupils known to be eligible for free school meals. 40 per cent are not in “sustainable employment” 12 years after taking their GCSEs. ¹³
	Energy – Gaining access to electricity can be transformative – for children’s education, household life, community healthcare and the local economy.	Energy costs have been a key feature of the cost of living crisis. While these costs have come down in recent years, energy remains a key contributor to the cost of living well in London. With challenges to longer term sustainable supply of energy, and increasing pressure on the grid ¹⁴ , energy provision could be an increasingly challenging element of a social foundation for London.	Department for Energy Security and Net Zero provides sub regional data on Fuel Poverty National Energy Action provide fuel poverty data at a constituency level Trust for London provides a Fuel Poverty Map of London Government provides EPC data on all domestic and commercial properties in London , providing insight into efficiency The London Fuel Poverty Partnership, brings together partners to discuss and reflect on fuel poverty. Minutes can be found here	Around 9% of London homes live in fuel poverty. This ranges from 5% in City of London to around 20% in Newham (vs national average of 11%).
Empowered	Peace & Justice – Peaceful and just societies enable people to live in community, free from fear and exploitation. They likewise address corruption in business and politics by building effective and accountable institutions at all levels.	London is an open city, with strong regulation and policing compared to other cities globally. That said, trust in police is falling and there remains a strong correlation between the experience of crime and those living in more deprived areas of the city. Peace and justice have strong links to other elements of a social foundation in London and remain deeply linked to social equity, community and trust in institutions.	Data on specific crimes is collected and reported publicly MOPAC provides a digest of data on crime and policing in London including statistics on trust and bespoke research on crime and justice in London Trust for London provides data on the relationship between crime and income deprivation	Neighbourhoods in the most income-deprived 10% of London record 41% more crimes overall than those in the least deprived 10%. Low confidence in policing correlates with deprivation. It ranges from 86% in Richmond Upon Thames to 49% in Newham.

12. <https://cfey.org/2021/02/the-london-schools-effect-revisited-a-saga-in-many-parts>13. <https://www.onlondon.co.uk/dave-hill-londons-education-story-can-grow-still-richer>14. <https://westlondon.com/west-london-energy-update-june-2025>

Empowered cont.	Social Equity – People living in more equal societies tend to be healthier, safer, and more trusting compared to those in less equal societies.	Inequity and inequality are noted features of London’s economy. The gap between the richest and poorest in the city is growing and is well documented. This is exacerbated by policy in relation to other elements of the social foundation, in particular housing and work. Addressing this is perhaps the most significant area for intervention in support of London’s social foundation.	GLA provide data on Economic Fairness and specifically on wealth inequality Trust for London provides the most complete dataset on poverty and inequality through its poverty profile Many of London’s Universities have specific research teams focussed on social equity and inequality in London. These include: • Greenwich • Queen Mary • UCL	The top 10% in income have ~9.3× the income of the bottom 10% (vs 4.9 nationally). The poorest 50% in London hold only 4% of the city’s wealth. The poverty rate has been declining since the pandemic but there are significant disparities. In four East London boroughs (TH, Newham, Hackney and Barking and Dagenham) over 40% of children grow up in poverty.
	Political Voice – Democratic institutions, freedom of expression, freedom of association, and a free media all tend to support more inclusive, participatory and representative decision-making in public life.	In the global context, the UK is amongst the more democratically open countries. With 16 year olds being able to vote, democracy will be an even more significant element of life in London. Ensuring good information to inform and involve Londoners, is key to the long term future of the city.	London Elects provides data on turnout and voting at elections in London British Social Attitudes Survey provides data on trust in politicians	Voter turnout in London local elections is declining. London saw one of the most significant regional decreases in turnout between the last two general elections, Barking and West Ham & Becton constituencies had amongst the lowest turnouts in the county. ¹⁵ Only 3% of London residents say they trust politicians. ¹⁶ In 2024, 28% of those turned away from polling stations for a lack of ID did not return to vote. This was highest in Tower Hamlets, Waltham Forest, Lewisham and Lambeth. ¹⁷
	Equality – This is regardless of differences of identity – such as gender, ethnicity, sexuality and ability – while recognising that historically groups of people have experienced significant discrimination on the basis of these characteristics.	There are 300 languages spoken in the city making it the most diverse in the world in the Urban Diversity Index. ¹⁸ This diversity does not always translate into equal access to opportunities. In the context of a rise in more populist politics, it is important that London’s communities do not become marginalised from a good quality of life due to their ethnic background, gender identity, age or sexual orientation.	Trust for London provides detail on Poverty and Ethnicity in London as well as a deep dive on deprivation and gender identity Runnymede Trust provides a range of targeted research on racial inequality and racism in the UK GLA has provided data on ethnicity pay gaps	There are high rates of poverty among many minority ethnic groups – 59% of Bangladeshi, 53% of Pakistani and 42% of Black households in London are living in poverty after housing costs. Loneliness is felt unequally and disproportionately impacts some groups in London this is 8% this is 12% for young Londoners; 18% for low-income Londoners; 15% for LGBTQ+ Londoners; 12% for Single Parents; 18% for Deaf and Disabled Londoners, and as high as 14% for some ethnic minority groups. ¹⁹ Ethnic minority households are a quarter less likely to own their home than White households. Since 2001, homeownership rates have dropped 6.3%, from 68.9% to 62.5%, comprising a 8.5% drop among ethnic minority households, and a 3.1% drop among White British households. ²⁰

18. [Developing the Urban Diversity Index \(UDI\): A Global Comparison of Urban Qualitative Aspect and Its Implications for Sustainable Urban Planning Using POI Data](#)

19. https://www.london.gov.uk/programmes-strategies/communities-and-social-justice/loneliness-london?utm_source=chatgpt.com

20. <https://tfl.ams3.cdn.digitaloceanspaces.com/media/documents/Positive-Money-Housing-Demographics-Report-April-2023-2.pdf>

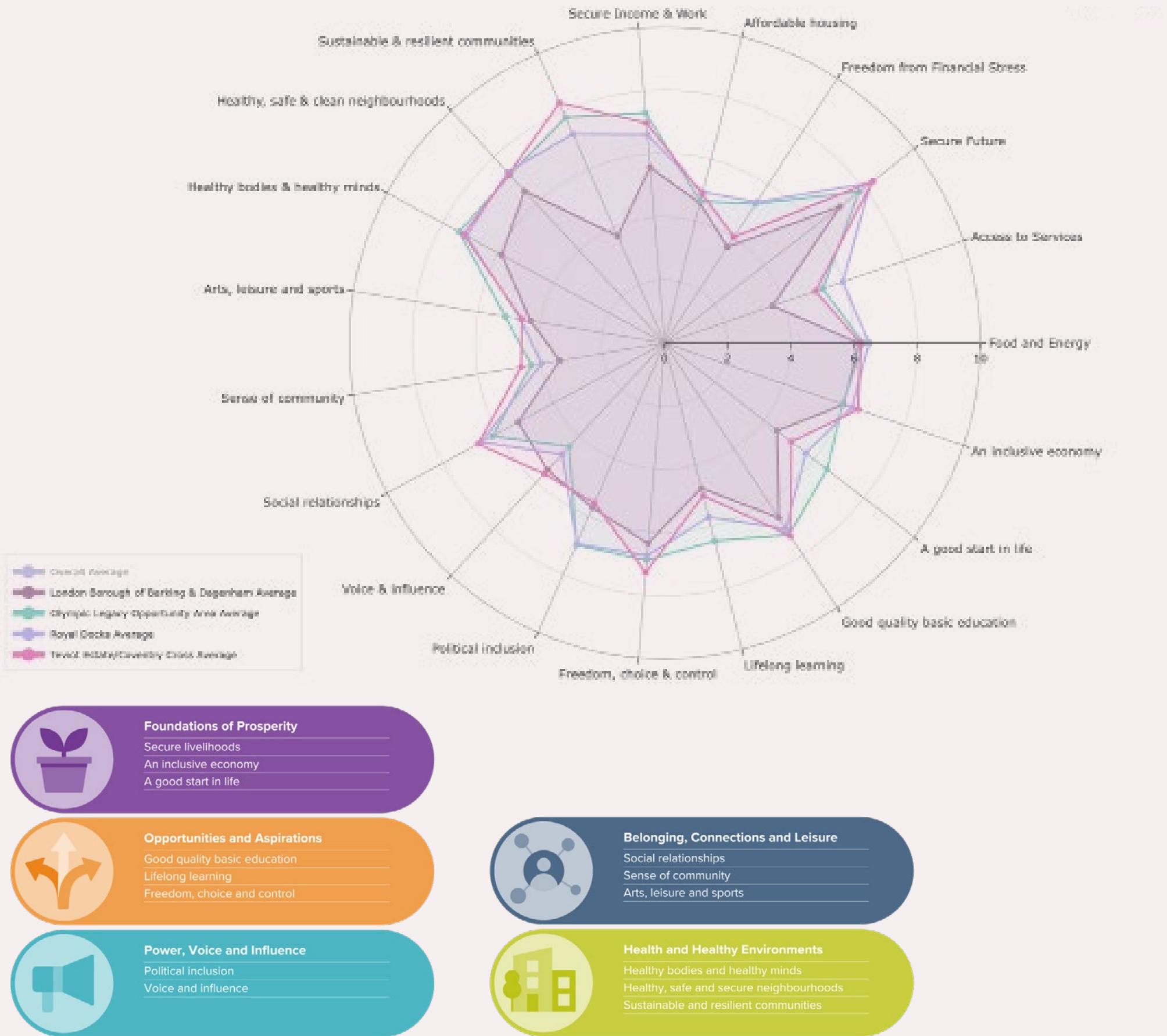
IMPROVING LONDON'S LOCAL SOCIAL PROFILE

It is clear that we are moving further from achieving our ambition for an economy which meets the needs of all Londoners. This is in part because we have not yet been able to establish a universal measure of a good life in London.

In Greater Manchester, the Mayor has established [Goodlives GM](#) which aims to establish, measure and then act around the idea of the foundations of a good life. Although the Mayor of London has previously launched a [Wellbeing and Sustainability Measure](#), this does not include many of the aspects of the Local Social lens.

In London, since the 2022 City Portrait, significant work has been undertaken in support of the London Prosperity Index. This multi-partner project overseen by the UCL Institute of Global Prosperity seeks to define the minimum conditions required to live a prosperous life in London; effectively a social foundation defined as a Secure Livelihood.

This work is empirical using citizen scientists to gather evidence from people in their local area. This has however been used to reframe [secondary analysis in East London](#), in a way which could be replicated for London. Creating this sort of analysis in a universally agreed form would be a clear step forward in establishing a better understanding of London's Local Social lens.



LOCAL ECOLOGICAL LENS

UNDERSTANDING LONDON’S LOCAL ECOLOGICAL PROFILE

London’s ecosystems, especially its woodlands and wetlands supply a range of valuable services to the city. In this section, we explain how nature works processes which are critical to all life, including our own.

Nature supplies these ecosystem services free of charge! Our economy and financial system still haven’t worked out an effective way to reflect the value of ecosystem services, despite the great benefits they provide for us humans. The failure to value healthy ecosystems, or the cost of their destruction, is one of the biggest weaknesses of our economic system.

For this lens, we used data from the [United Kingdom Natural Capital Accounts](#), published by the Office for National Statistics, to estimate the land use in the London region. As expected, most of London’s land area is classed as urban habitat (essentially, land covered by buildings or concrete), but almost nearly one quarter of the London region is farmland and smaller areas are covered by woodlands, wetlands and other natural habitats. We were able to use this data to make some rough estimates of some key ecosystem services supplied by London’s habitats: freshwater provisioning, regulation of air pollution and greenhouse gases.

Domain	Ecosystem Service	How nature does it	To work like nature, London could...	City target	Target type	Target source	City Status
Water	Water Provisioning	Bryophyte (liverworts, hornworts, and mosses) are a natural humidity regulator forests, absorbing water immediately at the ground level.	London could become a sponge city to be able to capture, filter and reuse rainwater, as well as allow for larger infiltration to the subsoil	London has targets for increasing green surface cover: More than 50% green cover and 10% increase in canopy cover / urban forest by 10% by 2050. Also habitat creation targets: Species-rich woodland: 20ha by 2025, 200ha by 2050; Flower-rich grassland; 50ha by 2025, 250ha by 2050; Rivers and streams: 10km by 2025; 40km by 2050; Reedbeds: 5ha by 2025, 30ha by 2050. But we did not find targets for water capture. Where there is a clear local need, local planning authorities can set out Local Plan policies requiring new dwellings to meet the tighter Building Regulations’ Optional Requirement of 110 litres per person per day.	City level	London Environment Strategy	London’s water sources supply an estimated 20 million cubic metres of water each year (estimated from the UK Natural Capital Accounts), but the resources can be uneven and unpredictable. In July 2021, London was hit by two flash floods, causing at least £100m of insured damage costs. Yet, London has an estimated water resource gap of around 100m litres per day.
Water	Water Quality	Bacteria metabolises organic matter as energy for their cells	London could introduce ecological wastewater treatment units, where bacteria and vegetation work together to treat and filter the water; and introduce nature-based sustainable drainage systems to reduce pollutant runoffs.	UK wide goal for wastewater: Proposed target – An 80% reduction in phosphorus by 2037 against a 2020 baseline	No city target	None found	Only one of London’s 47 river water bodies is classed as ‘good’ – three are ‘bad’, five are ‘poor’ and the rest are ‘moderate’ under the EU Water Framework Directive. The poorer the quality of water, the lower its ability to support wildlife and biodiversity.
Land and water	Carbon sequestration	Trees, plants and microalgae use soil nutrients and CO2 to transform into biomass and oxygen	London could introduce algae farms and increase tree and vegetation cover to help to capture carbon emissions.	Net zero by 2050.	City level	London Environment Strategy	An estimated 60,000 tonnes of greenhouse gases is removed from the atmosphere each year by London’s woodlands (extrapolated from the UK Natural Capital Accounts). However, London’s wetlands may be a net emitter of carbon due to poor condition; and farmlands due to frequent tillage and application of fertiliser. Improving the condition of wetlands and moving towards lower-impact farming models would help to reduce these emissions.

The City Portrait model typically pulls out a set of ecosystem services for consideration in each city. We set out the status of the relevant ecosystem services and what we could find out about any targets for improving them in London’s policy documents.

Methods around evaluating local environmental impacts are progressing all the time, adding to the body of work developed through the [United Nations System of Environmental Economic Accounting](#). Gross Environment Product may develop as an area to account more effectively for the environmental value (or changes to natural capital) that human interventions and policy decisions create. We hope to be able to explore these further in future city portraits.

IMPROVING LONDON’S LOCAL ECOLOGICAL PROFILE

Although London does have substantial natural assets, many of them are in a poor condition which limits their ability to support wildlife and biodiversity, and provide ecosystem services effectively. London’s Environment Strategy sets ambitions to improve London’s habitats. Whether and how these ambitions are successfully delivered and monitored will be critical in ensuring the city has a healthy and productive natural environment with all the benefits this brings.

Land	Biodiversity Support	Ecotones support diversity and species interaction	London could create transition zones and nature corridors with long borders to foster larger biodiversity in contrasting areas.	Habitat creation targets Species-rich woodland: 20ha by 2025, 200ha by 2050; Flower-rich grassland; 50ha by 2025, 250ha by 2050; Rivers and streams: 10km by 2025; 40km by 2050; Reedbeds: 5ha by 2025, 30ha by 2050.	City level	London Environment Strategy	Over 40 percent of public land in London is made up of green space on land of 14,164 hectares. There are 8.4 million trees across the capital, nearly one for each of the 8.6 million Londoners. That said, many natural habitats in the London region are in a poor condition, which limits their ability to support wildlife and supply critical ecosystem services.
Land	Energy Harvesting	Organisms survive winter’s challenges by adjusting microhabitats to reduce energy loss	London could define minimum insulation performance requirements to reduce the demand of energy.	The London Environment Strategy notes the importance of energy efficiency in built environment for achieving net zero, but does not have any explicit targets for insulation.	No city target found	None found	Many homes and other buildings in London still have low energy efficiency, meaning that more power is needed to heat them than buildings which are well insulated and energy efficient.
Land	Waste generation	Earthworms use organic material as food.	London could introduce vermicomposting units, where worms consume the organic matter and produce rich fertilizer by releasing excreta rich in nitrates and aerating the mix.	Make London a zero waste city. By 2026 no biodegradable or recyclable waste will be sent to landfill, a 65% municipal waste recycling rate by 2030, to reduce food waste by 50% per person by 2030.	City level	London Environment Strategy	Around 1.5m tonnes of food are lost and wasted each year in London’s food and beverage supply chain alone.
Air	Air Quality Regulation	Leaves can capture ultrafine air pollutant particles and are also able to absorb gaseous pollutants.	London could introduce green walls in areas with high pollution	London will have the best air quality of any major world city by 2050	City level	London Environment Strategy	London’s woodlands and urban trees remove an estimated 25,000 tonnes of air pollution each year (extrapolated from the UK Natural Capital Accounts). Cleaner air in London brought about by the low emission zone since its establishment contributed to a 4.5% reduction in long-term health problems and an 8% decrease in respiratory issues like asthma and bronchitis.
Air	Temperature Regulation	Leaves are cooled by drawing soil moisture up through the tree and into leaf stomata that release water vapor to the surrounding leaf and to the atmosphere.	With increased green infrastructure, London could reduce the ‘heat island’ effect.	London will be the world’s first National Park City where more than half of its area is green.	City level	London Environment Strategy	The centre of London can be up to 10°C warmer than the rural areas around the city due to the urban heat island (UHI) effect. Parks, green areas and trees in the city can help mitigate and cool these heat islands, but many poorer parts of the city lack substantial green cover.

GLOBAL ECOLOGICAL LENS

UNDERSTANDING LONDON’S GLOBAL ECOLOGICAL IMPACTS

We developed the global ecological lens with reference to the **planetary boundaries**, a framework first introduced by Stockholm University researchers in 2009. The planetary boundaries define a safe operating space for humanity by identifying critical global systems impacted by human activity. As of 2023, all nine planetary boundaries have been quantified, with evidence showing that six have already been exceeded worldwide.

Our assessment for the London Doughnut City Portrait uses 2018 research by O’Neill et al.²¹ to define per capita quotas – as shown in the Table below. The research focuses on biophysical indicators where data is available and incorporates ecological and material footprint metrics, used as aggregate metrics.

Planetary boundary and per capita boundary

Biophysical Indicator	Planetary Boundary	Per Capita Boundary
C02 Emissions	2C Warming	1.61 t C02 y -1
Phosphorus	6.2 Tg Py -1	0.89 kg P y -1
Nitrogen	62 Tg N y -1	8.9 kg N y -1
Blue Water	4000 km y -1	574 m3 y-1
eHANPP	18.2 Gt Cy -1	2.62 t Cy -1
Ecological Footprint		1.72 gha y -1
Material Footprint		7.2 t y -1

Planetary boundaries were originally designed for assessment at the global level, given the highly interconnected nature of the Earth system processes they represent. Following this, researchers have adapted them for local assessments. Using a per-capita allocation method of the quotas is a common approach for sharing the safe space. Although this approach does not account for historical contributions to environmental damage, it does allow for setting local quotas and comparing them against actual performance, enabling a scientific basis for decision-making by highlighting areas needing improvement.²²

For our analysis, where possible we used data at the London level; otherwise, national or regional data for England or the UK was downscaled to London. All indicators are calculated on a per capita basis using London’s population estimates. For each indicator, the latest data available was used.

As the global systems which define the planetary boundaries are complex, London’s planetary boundary accounting should be viewed as an illustration of the city’s ecological performance, not as a definitive measure of whether London is operating within its safe limits.



21. O'Neill, D. W., Fanning, A. L., Lamb, W. F., & Steinberger, J. K. (2018). A good life for all within planetary boundaries. *Nature sustainability*, 1(2), 88–95.

22. Meyer, K., & Newman, P. (2018). The planetary accounting framework: A novel, quota-based approach to understanding the impacts of any scale of human activity in the context of the planetary boundaries. *Sustainable Earth*, 1, 1–21.

CALCULATING LONDON’S GLOBAL ECOLOGICAL IMPACTS

London’s environmental impacts (consumption-based except land-system change)	Unit	Boundary	London	Planetary boundary overshoot
Climate change (Carbon emissions)	tCO2e/y	1.61	8.9	5.5
Ocean acidification (Carbon emissions)	tCO2e/y	1.61	8.9	5.5
Material footprint	t/y	7.2	8.2	1.1
Ecological footprint	Dobson Units	1.72	3.7	2.2
Biogeochemical flows (Nitrogen)	N kg/y	8.9	17.2	1.9
Biogeochemical flows (Phosphate)	P kg/y	0.89	1.1	1.2
Land-system change (Woodland)	area of forested land as % of original forest cover	25%	69%	2.8
Freshwater use (Blue water)	l/year	574,000	1,514,922	2.6
Atmospheric aerosol loading / Air pollution	t/y	0.1	0.06	0.6
Biosphere integrity	No data	No data	No data	No data
Stratospheric ozone layer depletion	No data	No data	No data	No data
Novel entities / Chemical pollution	No data	No data	No data	No data

Climate change

The climate change boundary is defined by the city’s carbon footprint, for which data is available on London’s consumption-based greenhouse gas emissions.²³ This measure captures all 2021 emissions from households, government, and capital investments, including those that originate from goods and services produced elsewhere.

Ocean acidification

Since ocean acidification is primarily driven by the absorption of atmospheric carbon, like climate change this boundary is also covered by the carbon footprint indicator.

Biogeochemical flows

This boundary is measured using nitrogen and phosphate indicators. For this calculation, we downscaled national level consumption-based data on nitrogen and phosphate use.

Land system change

London’s land system changes performance build on an estimate that England’s woodland cover in circa 1000 AD was 15%.²⁴ Based on O’Neill et al., the planetary boundary for land-system change is set at maintaining at least 75% of original forest cover. For London, the original forest cover was assumed to be 15% – as general in England. Today, it has declined to 5%.²⁵

Freshwater use

We used the blue water indicator to describe the freshwater use planetary boundary, building on data on the 2015 UK water footprint.²⁶ This was downscaled to London water footprint by comparing UK²⁷ and London²⁸ water consumption.

Air pollution

The Aerosol Optical Depth (AOD) indicator is used to assess the air pollution boundary. AOD measures the extent to which airborne particles (aerosols) block sunlight from reaching the Earth’s surface. While not included in O’Neill et al., it is an indicator used by Meyer & Newman in the Planetary Accounting Framework (2018), which puts the boundary at 0.1.²⁹ London median AOD was estimated at 0.06 in 2023 using Copernicus data.³⁰

Material footprint and ecological footprint

Following the approach from O’Neill et al., material³¹ and ecological^{32/33} footprints were added to the assessment to further describe London performance using macro indicators.

- The material footprint reflects material consumption (biomass and non-biomass – domestic extraction plus imports and minus exports).
- The ecological footprint is “a measure of how much area of biologically productive land and water an individual, population, or activity requires to produce all the resources it consumes and to absorb the waste it generates”.³⁴

Boundaries with no data

The following planetary boundaries could not be quantified at the time of the research:

- Biosphere integrity
- Novel entities / Chemical pollution
- Stratospheric ozone layer depletion.

23. <https://data.london.gov.uk/dataset/london-s-consumption-based-greenhouse-gas-emissions>
24. (2021). A brief history of British Woodlands. Royal Forest Society.
25. Audit of Woodland in Greater London, London Biodiversity Partnership
26. Allan, G., Lochhead, R., & McGrane, S. (2023). A water stress perspective on the UK’s water footprint. Applied Economics Letters, 30(5), 649–656.
27. <https://www.statista.com/statistics/1211708/liters-per-day-per-person-water-usage-united-kingdom-uk>
28. <https://www.london.gov.uk/who-we-are/what-london-assembly-does/questions-mayor/find-an-answer/water-use>
29. Meyer, K., & Newman, P. (2018). The planetary accounting framework: A novel, quota-based approach to understanding the impacts of any scale of human activity in the context of the planetary boundaries. Sustainable Earth, 1, 1–21.
30. Di Antonio, Ludovico, et al. “Aerosol optical depth climatology from the high-resolution MAIAC product over Europe: differences between major European cities and their surrounding environments.” Atmospheric Chemistry and Physics 23.19 (2023): 12455–12475.
31. 2024 London data
32. 2004 London data
33. 2004 data was updated to 2021 using England ecological footprint change
34. <https://data.footprintnetwork.org/#/abouttheData>

IMPROVING LONDON'S GLOBAL ECOLOGICAL

As we have noted in the main City Portrait, London's global ecological impacts are untenable and leading to ecological breakdown across the world. To address this, major change in the way London, its economy and its people use natural resources will be needed.

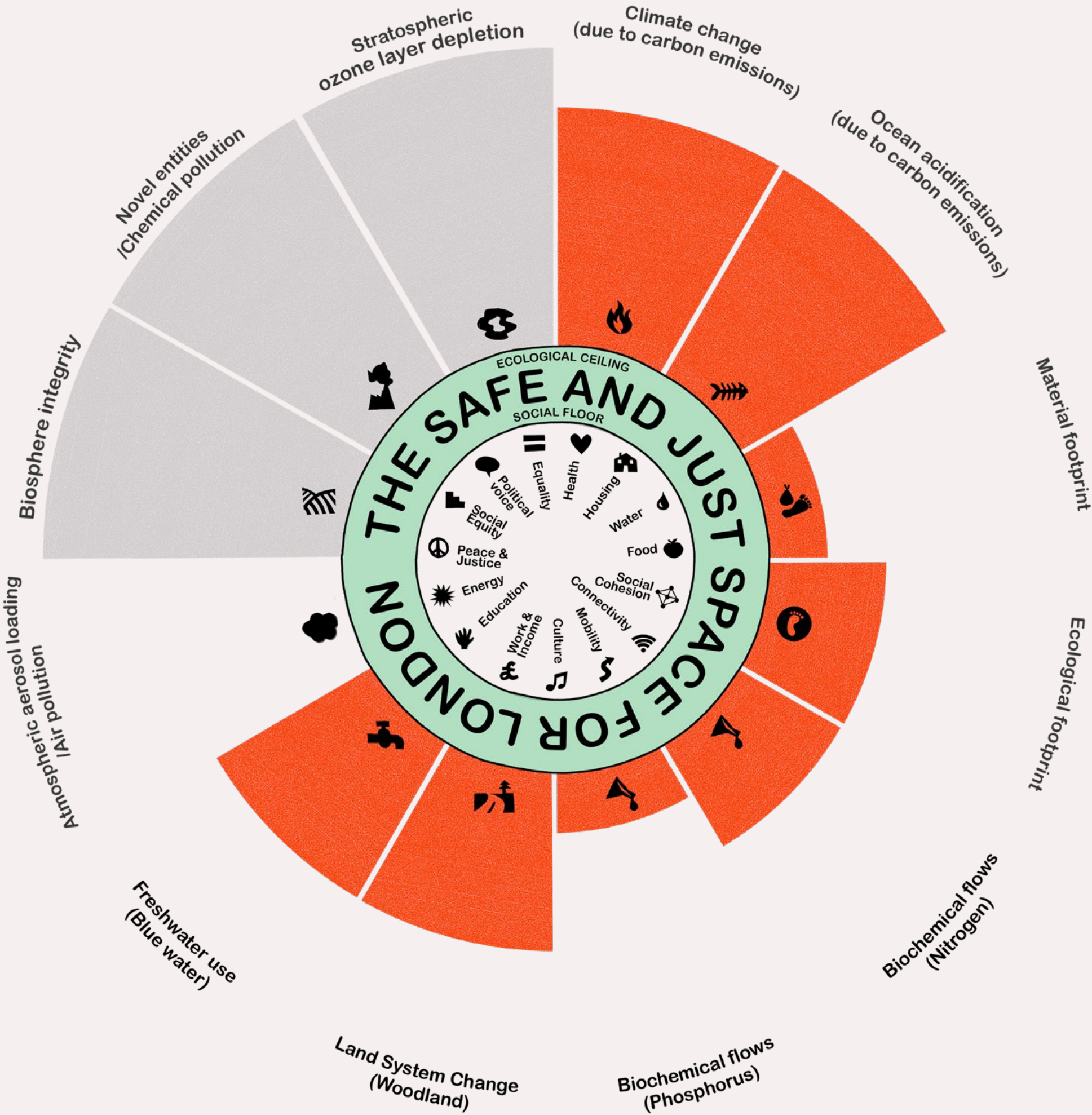
This includes reducing carbon emissions to mitigate climate change. It also includes moving towards a circular economy model to reduce the material footprint needed to produce the goods and services that London consumes, and towards sustainable and regenerative food systems which nourish rather than harm biodiversity and the natural world.

LONDON'S GLOBAL ECOLOGICAL DOUGHNUT

This diagram shows our calculations of London's impacts on the world's ecological ceiling (the Global Ecological lens).

The green circle represents the safe and just space inside the Doughnut, and the red bars indicate the degree of London's overshoot on each of the planetary boundaries.

London is overshooting on all the global ecological indicators that we have been able to calculate except for air pollution (the three ecological indicators in the grey bars are not calculated due to lack of usable data at present).



GLOBAL SOCIAL LENS

UNDERSTANDING LONDON'S GLOBAL SOCIAL IMPACTS

Of the four lenses, the Global Social lens is perhaps the most challenging to analyse, and the most complex to provide steers for action.

To do our analysis of London's global social impacts, we started with Doughnut Economics Action Lab's Doughnut Unrolled methodology and developed it where we were able, to explore the dynamics of this lens.

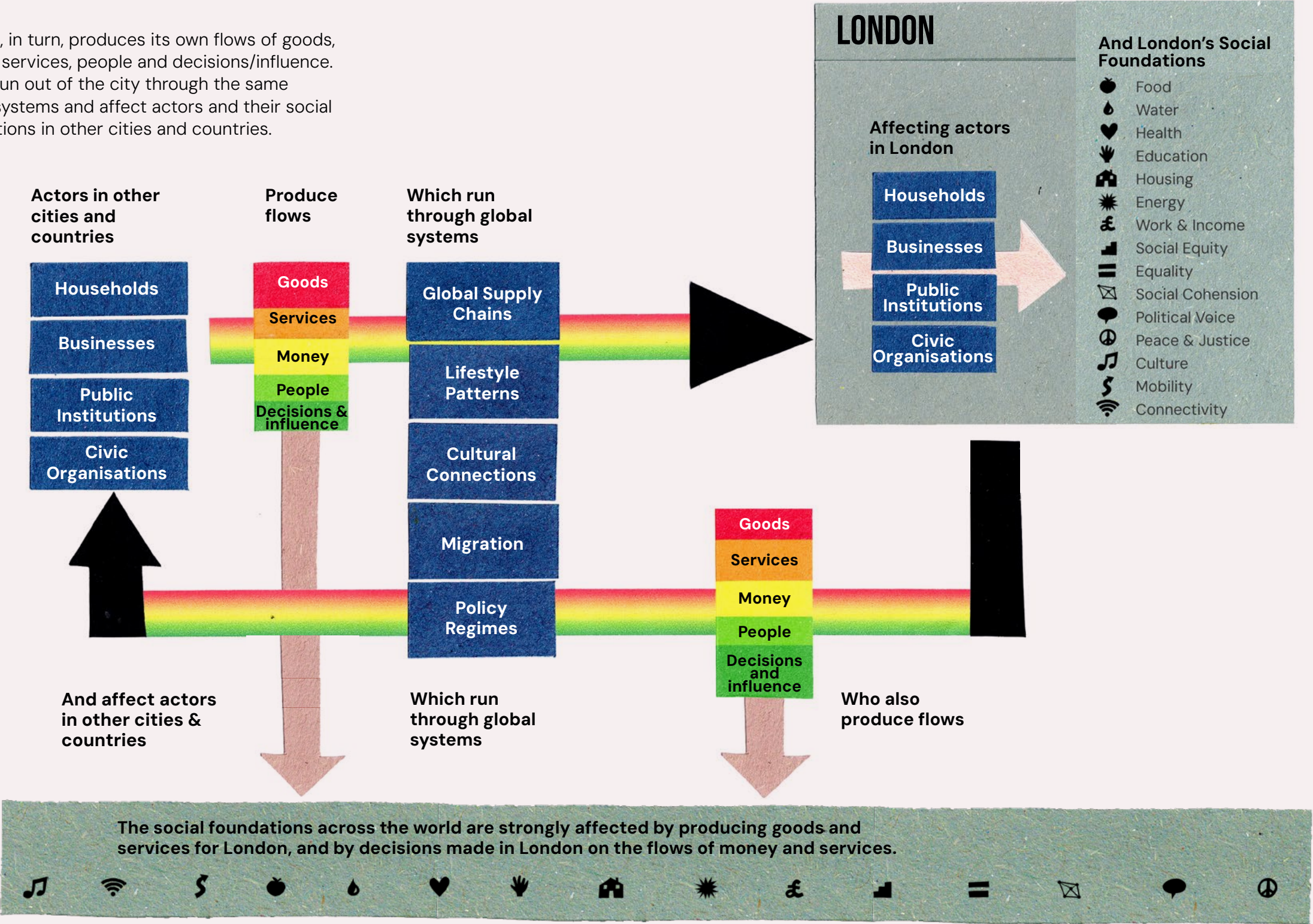
Like other global nexus cities, London has substantial impacts across the whole world.

We have started to map these in terms of five critical **flows** which flow into and out of London: **goods, services, money, people, and decisions/influence**.

These flows are produced by **actors** (households, businesses, public institutions, civic organisations) in other cities and countries, and run through **global systems** (such as supply chains, lifestyle patterns, cultural connections, migration and policy regimes) to London.

The processes through which these flows are produced affect the **social foundations** of the actors in the places where they are produced. These impacts can be either positive (for example, they may spur economic development) or negative (for example, they may pollute water supplies). The flows of goods, money, services, people and decisions/influence into London also affect the city's own social foundations in many and complex ways.

London, in turn, produces its own flows of goods, money, services, people and decisions/influence. These run out of the city through the same global systems and affect actors and their social foundations in other cities and countries.



HOW FLOWS INTO AND OUT OF LONDON
HAVE SOCIAL IMPACTS ACROSS THE WORLD

Understanding the global impacts of flows into and out of London is complex; and any attempt to measure them at a high level inevitably cancels out a huge variety of situations on the ground and an almost infinite number of human stories.

We believe that both **quantitative** and **qualitative** approaches are needed to truly understand London’s global social impacts, and set a course towards **reducing its negative impacts** and **increasing its positive impacts**.

In this analysis, we use top-level quantitative data to give pointers to areas for further investigation and to guide agendas to make London’s global impacts more positive on the whole.

Goods and services

First, we can see that London **imports** more goods (valued at £62.6 bn in 2021) than it exports (£37.8 bn in the same year), while it **exports** more services (valued at £152.2 bn in 2021) than it imports (£75.9 bn in the same year).

This suggests that London has larger social impacts due to the **goods it consumes** (including the raw materials and production processes which make them) than the goods it produces, while the impacts of the **services produced in London** are likely greater than those that London uses.

The social costs of the carbon emissions associated with goods and services imported to and exported from London alone came to an estimated £8.4 bn in 2021. The carbon emissions of imports are calculated as higher than exports

because many countries where goods and services are produced have energy systems and economies which are more carbon-intensive than the UK.

Carbon is only one dimension of London’s footprint. Although we have not examined the **full material footprint** under this lens (although it is covered in the global ecological lens), understanding this is a priority for future work, following approaches such as those used the Barcelona City Portrait.

Money

Critical in understanding London’s outward impact flows is its role as a **central node of the global financial system**. Huge sums of money flow through London: £1.3 trillion of capital was traded through the London Stock Exchange in 2013, representing buying and selling stakes in companies, assets and commodities across the world. London received £10.2 bn in **foreign direct investment** in 2021 and **invested** an estimated £14.5 bn abroad.

These figures show us the magnitude of the financial flows, and reflect the fact that London is both a place where a large number of decisions around individual investments are made and the place that sets many of the rules that govern global financial decision-making.

Additionally, individuals sent nearly £2 bn in **personal remittances** out of London in 2021. Personal remittances sent from abroad represent critical sources of income in some poorer parts of

the world.

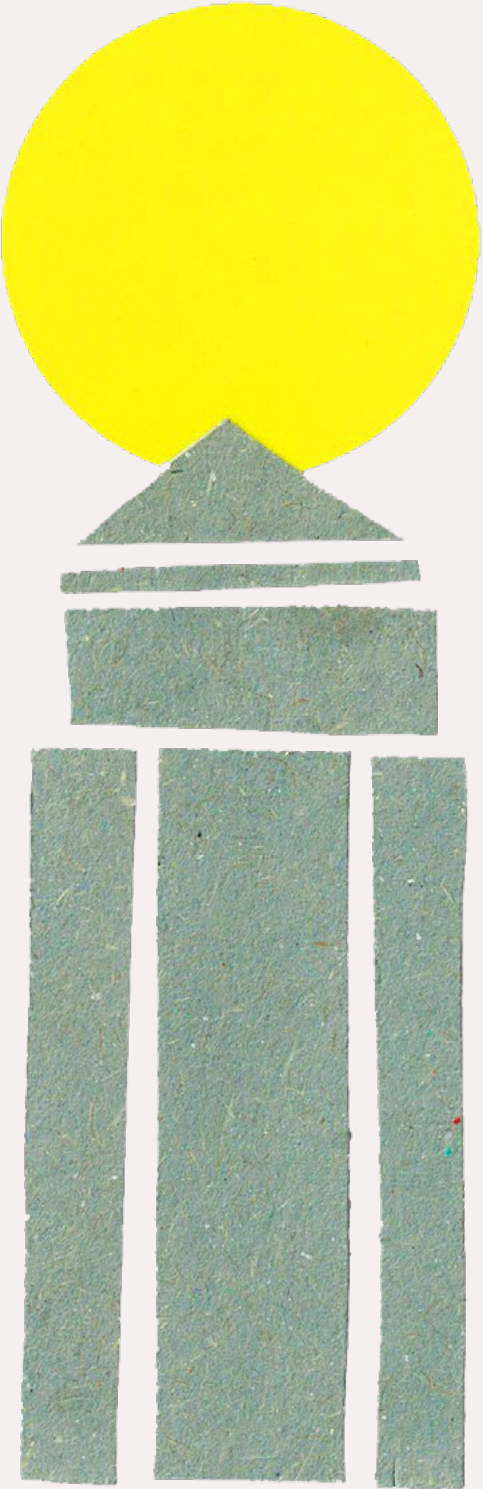
People

By official figures, nearly twice the number of people (170,520) **migrated** permanently to London in 2023 than permanently left the city. Again, this could have positive or negative consequences in the wider world. Migrants to London might send money back to support relatives, but their departure might depress the economy in their place of origin, especially if they are highly skilled – a phenomenon often referred to as “brain drain”.

London received more than 20 million overnight stays from **tourism** in 2023 and Londoners spent nearly 8 million nights on holiday elsewhere. Tourism carries flows of money to different places, and also influences the outlook of both travellers and host locations, contributing to both economic and social changes.

Decisions and influence

Finally, the global impacts of decisions made in London and its wider influence are even more difficult to quantify. These might include both dimensions of “hard power” such as **foreign policy, investment or military** and “soft power” such as the influence of London’s culture or education institutions. We have not attempted to quantify these.



IMPROVING LONDON'S GLOBAL ECOLOGICAL IMPACTS

For London to respect the wellbeing of people worldwide, it is essential to understand the city's role in global systems; and develop policies, trade and investment models, and social connections which support rather than undermine social foundations across the world.

Government, businesses and London's finance system will have critical roles in making this happen. We provide some recommendations for each of these actors to build on earlier work in the Four Lenses section of the City Portrait.

Here we can return to our earlier point that the four lenses are connected: positive action around one lens should be designed so as to support the others.

From the financial perspective, the critical changes needed include using capital to strengthen local social foundations and protect local ecological systems; steering global financial flows to support social wellbeing and reduce ecological overshoot worldwide; and integrating metrics, monitoring, and reporting across all four lenses to ensure measurable impact.

Success in implementing this agenda could allow London to become the world's first major financial hub to make the social floor and ecological ceiling a fundamental part of how it does business, demonstrating that thriving people and a safe planet are compatible with profitable, resilient finance.

Annual critical flows (metric)	Into London	London's economy	Out of London	Year	Basis of calculation
Goods					
Imports and exports (£bn)	62.6		37.8	2021	UK value of goods imports and exports; Regional data from Office for National Statistics
Social cost of embodied carbon (£bn)	2.6		0.5	2021	((Consumption emissions – territorial emissions) * social cost of carbon) * adjustment for proportion of good vs services
Social cost of material footprint (£bn)	?		?		Not yet calculated
Services					
Imports and exports (£bn)	75.9		152.2	2021	UK value of goods imports and exports; Regional data from Office for National Statistics
Social cost of embodied carbon (£bn)	3.1		2.2	2021	((Consumption emissions – territorial emissions) * social cost of carbon) * adjustment for proportion of good vs services
Social cost of material footprint (£bn)	?		?		Not yet calculated
Money					
Capital traded through London Stock Exchange (£bn)	1,338.0		1,338.0	2023	Data from LSE
Foreign direct investment (£bn)	10.2		14.5	2021	UK-level inbound and outbound FDI data from ONS. Gross Value Added: London as a percentage of UK, to extrapolate London's share of UK inbound/outbound FDI.
Personal remittances (£bn)	0.6		1.9	2021	UK-level inbound and outbound personal remittances from World Bank, Gross Value Added: London as a percentage of UK, to extrapolate London's share of UK inbound/outbound FDI.
People					
Migration (long-term, individuals)	170,520		74,620	2023	Immigration to and emigration from the UK *adjusted for London's proportion of UK population
Tourism (overnight stays, million)	21.7		7.8	2023	Overnight stays in London; UK population visits abroad *adjusted for London proportion of UK population
Decisions and influence					
Hard power			Policies, investment, military		Not quantified but we estimate greater outbound influence

GLOSSARY

City Portrait	A structured evidence base and framework for diagnosing problems and inspiring action towards a better economy for London	Global Social Lens	An analysis of how London’s critical flows impact the wellbeing of people worldwide
DEAL	Doughnut Economics Action Lab, the organisation that developed the Doughnut framework and methodology	LDEC	London Doughnut Economy Coalition, the organisation behind the City Portrait
Doughnut Economics	An economic framework developed by Kate Raworth that aims to meet society’s needs within the planet’s limits	Local Ecological Lens	An analysis of the state of the natural environment within London’s boundaries
Doughnut Unrolled	DEAL’s methodology for developing City Portraits	Local Social lens	An analysis of London’s social and economic conditions at a local level
Ecological Ceiling	The environmental limits within which human activity should operate	Safe and Just Space	The area inside both the social foundations and the ecological ceiling
Five Critical Flows	Goods, services, money, people, and decisions/influence flowing into and out of London	Social Foundations	The dimensions of human wellbeing, including food, health, education, housing, energy, and equality
Four Lenses	The analytical framework used in the City Portrait, including the Local Social Lens and Global Social Lens	Working Coalitions	Spaces to explore new ways of working in support of a better economy, enabling the Earthshots
Global Ecological Lens	An analysis of London’s impacts on the planet’s critical systems (planetary boundaries)		

FURTHER READING

Here we provide some suggestions for readers who want to explore some of the materials discussed in the City Portrait in more detail.

DOUGHNUT ECONOMICS FRAMEWORK AND METHODS:

- Raworth, Kate. 2012. Doughnut Economics
- [The Evolving Doughnut](#)
- [The Doughnut Unrolled](#)
- [Creating City Portraits](#)

OTHER CITY PORTRAITS:

- [London City Portrait version 1](#) (2022)
- [Amsterdam City Doughnut](#) (2020)
- [Greater Melbourne City Portrait](#) (2023)
- [Leeds Doughnut](#) (2022)
- [Barcelona's Data Portrait](#) (2023)

KEY LONDON POLICIES:

- [The London Environment Strategy](#) (2018)
- [All of Us: The Mayor's Strategy for Social Integration](#) (2018)
- [The London Plan](#) (2021)
- The [London Growth Plan](#) (2025)

Credit: Tika Sufyan





LDEC WOULD LIKE TO THANK

Many people have contributed to creating this second London City Portrait. We would like to thank everyone for the conversations, insights and commitment to positive change that has gone into producing this document. This list includes a special shout out to the following people:

Tom Owen-Smith
Chris Paddock
Ben Michel
Carolina Eboli
Diba Salam
Sue Chong
Humaira Ali
Mary Clegg
Jo Woods
Tansy Drake
Anjalee Ramjee

Narjess Hachena
Tim Rose
Aarti Sehdev
Lilian Marino
Ed Jarvis
Carolyn Bowman
Chris Brown
Andrew Fanning
Leonora Grcheva
Richard Peers