



Natural Environment Research Council



University of Glasgow

THRIVING GLASGOW PORTRAIT

A SHARED VISION FOR A HEALTHY,
EQUITABLE AND SUSTAINABLE FUTURE

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i FOREWORDS



Anton Muscatelli
Principal and Vice Chancellor
University of Glasgow

It has now been two years since the world came together in our city for COP26 and four years since both Glasgow City Council and the University of Glasgow declared a climate emergency. The discussions during COP26 and the period since have centred around the need for an equitable and just transition. As a civic institution working in partnership with the City, it is incredibly important that we maintain momentum from COP to tackle our planet's most significant threat, while ensuring no communities are left behind.

Going beyond net zero will require the most radical economic transformation in a century. Universities must use their research strengths and presence as anchor institutions in communities to enable a successful transition that delivers sustainable wellbeing for people and the planet. The University of Glasgow aims to be a driving force for sustainable and impactful change on a local, city-wide scale. The test is our capacity to look beyond our traditional silos to work collectively with the communities we serve to make the necessary changes at pace.

Our University is committed to achieving our ambitious 2030 targets, and by spearheading initiatives such as the interdisciplinary GALLANT research programme with city partners, we will continue to foster the creative and grassroots solutions and practices needed to drive impact at home and right across the globe. While I am proud of our commitment, which has seen us take our place in the top 13 most sustainable universities worldwide, I recognise the path ahead is challenging, and we cannot stand still or act alone.

I firmly believe that the Thriving Glasgow Portrait demonstrates a key step in our efforts to shape local decision-making that uses our economic and social resources to address the impact of the climate crisis on our planet, while reinventing our city to succeed for the benefit of communities. The University will continue to be at the forefront of shaping a new vision for Glasgow and the wider city region, working with policymakers, businesses, charities, researchers and local people to chart a greener, fairer future for the city.

Our collective mission must be to turn the insights within this Portrait into tangible actions across the city. The University will continue to strengthen our partnership with Glasgow City Council in the years ahead, as we play our part in delivering the city's vision for a sustainable future. Of course, we know it will take involvement from every member of our community to achieve this ambition, and I hope this publication will provide the basis for us to work together to ensure that Glasgow becomes the Thriving City we want to see.



Councillor Susan Aitken
Leader of Glasgow City Council

Glasgow is a city increasingly recognised by the world as a global leader for climate action and ambition. As host of COP26 we helped bring to prominence issues that are critical to the future security and wellbeing of our planet, from the centrality of cities within the climate and ecological emergency to the investment demanded at a local level to deliver Net Zero. As a city in the process of transitioning to a new green economy and society and one committed to addressing the intertwined challenges of social and climate injustice, Glasgow is a place where solutions to the challenges of urban sustainability can be found.

The relationships we forged on the road to COP26 gave Glasgow the confidence to tell the story of how the legacies of our heavy industrial, high carbon past is driving our commitment to a socially just and ecologically safe city. Chief among these was the C40 network. The guidance, solidarity and leadership shown by our friends at C40 continue to help us navigate our path through the challenges we face and to scale up our ambitions in addressing them.

The Thriving Cities Initiative is a practical, living legacy of that relationship, a guide to Glasgow's social and economic transformation and how that can – and must – sit within planetary boundaries. But it also sets out an approach that reflects many of Glasgow's ongoing activities and policies to ensure our city and our planet can thrive.

I'm delighted that we have now reached a significant milestone on our shared journey with the publication of the Thriving Glasgow Portrait. Led by colleagues at the University of Glasgow, the Portrait presents a vision of how our thinking and our systems will come together to deliver on our climate resilience and net zero goals and the equitable and secure future citizens deserve.

Bringing together the social and ecological, the local and the global, the Portrait will also help us to monitor Glasgow's progress on our journey towards being a truly thriving place, and to work with our communities and across all sectors to secure that.

Glasgow continually rises to meet and overcome our challenges. We do so by harnessing a visionary, aspirational and transformative spirit and by nurturing the culture of collaboration the city is known for.

Our city motto is 'Let Glasgow Flourish'. By bringing together partners in this vision, and by aligning our existing ambitions with new ideas and thinking and new relationships, we will make that motto a reality, to become a truly thriving city.



ii EXECUTIVE SUMMARY

The Thriving Glasgow Portrait presents a vision for the future of Glasgow. It is a future where the people, wildlife, and ecology of Glasgow are all able to mutually thrive, and to thrive in ways that benefit the rest of the planet too.

To build this picture of a thriving future, the Portrait downscales the principles and framework of Doughnut Economics – a conceptual framework which aims to answer, ‘how can we meet the needs of all people within the means of the living planet?’

The Portrait aligns with Glasgow’s existing ambitions to become a Green Wellbeing Economy, to achieve Net Zero by 2030, and to deliver on the Sustainable Development Goals. During COP26, Glasgow announced its participation in the Thriving Cities Initiative (TCI), a programme initiated by C40 Cities, which supports cities in shifting towards more equitable and sustainable consumption patterns through collaboration, policy, communications and engagement. The Portrait marks one of the first outputs of both the TCI, and the 5-year, £10.2 million GALLANT research programme (Glasgow as a Living Lab Accelerating Novel Transformation) funded by UKRI NERC.

The vision of a Thriving Glasgow has been co-created by many different changemakers across the city, in partnership with researchers at the University of Glasgow and colleagues at Glasgow City Council. Through desk-based research and interactive stakeholder workshops, over the course of the past 18 months, we have worked together to build a picture of possibility for Glasgow.

The collaborative process co-created 44 definitions of the “ideal state” for Glasgow as a Thriving City in relation to the dimensions of the Doughnut Economics framework. These are considered through four different lenses: social and ecological, local and global. This has created a diverse, multi-dimensional picture of Glasgow’s current and new ambitions for the city’s sustainable future. The report also includes more detailed examples of what this might look like.

Cities are complex systems, made up of many interconnected parts that influence and impact each other. The Portrait aims to support understanding of these relationships and the links between different policy areas to allow changemakers to achieve outcomes in a holistic way. By taking a four-lens view, the Portrait provides a framework and examples to help us consider how action in one area might generate further improvements in another (co-benefits) or create any unintended or unforeseen negative consequences in another.

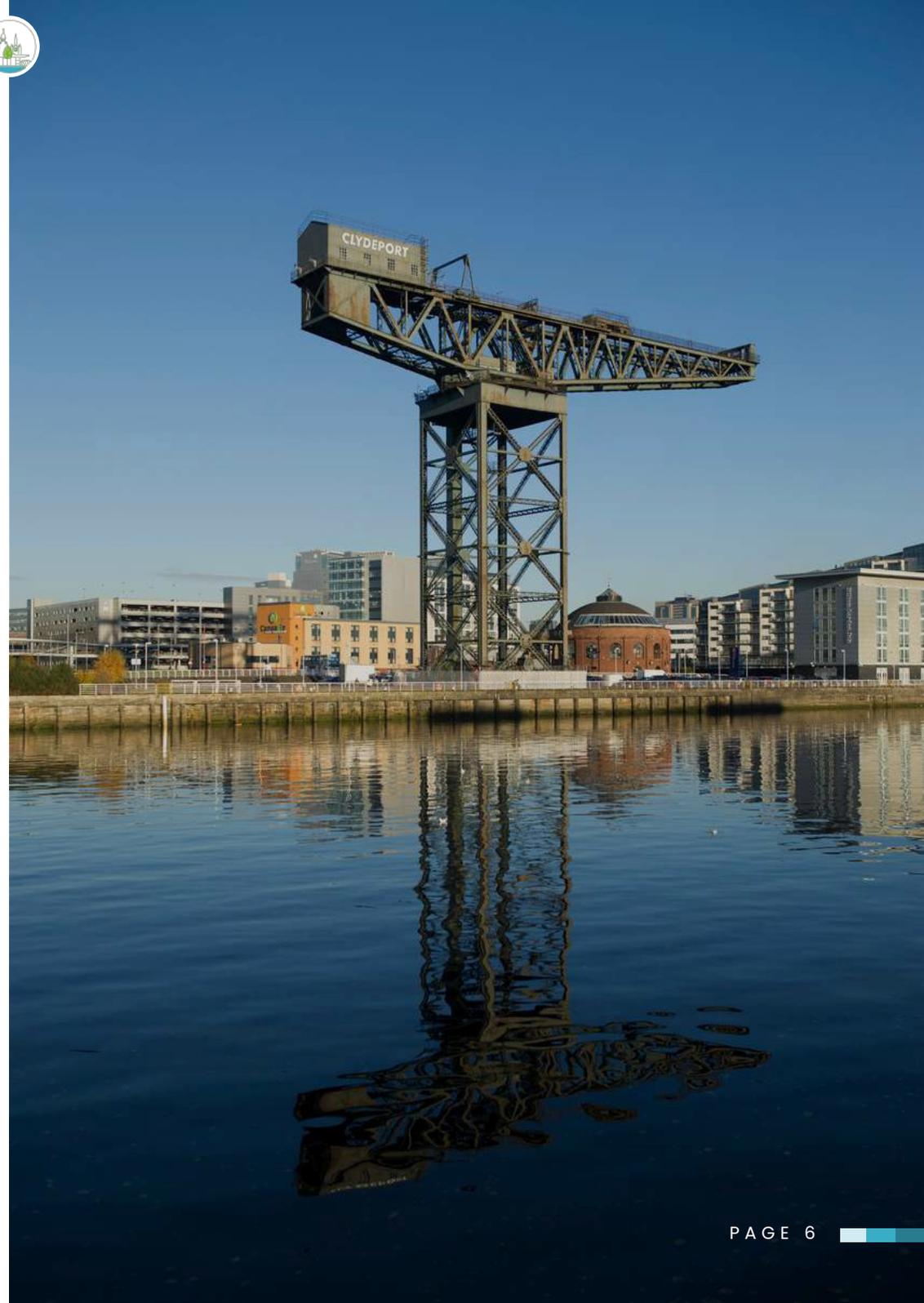
The Portrait aims to answer the following four questions, to present a holistic view of a thriving future for Glasgow, in a global context:

LOCAL ECOLOGICAL	GLOBAL ECOLOGICAL
How can Glasgow thrive within its natural habitat?	How can Glasgow respect the health of the whole planet?
How can all the people of Glasgow thrive?	How can Glasgow respect the wellbeing of all people?
LOCAL SOCIAL	GLOBAL SOCIAL



Glasgow is now part of a network of innovators that are experimenting with how to apply and embody the principles of Doughnut Economics. Putting this into practice can involve reinforcing existing work, scaling back degenerative activity, or initiating new action at small/local level or transformational scale.

The Thriving Glasgow Portrait provides a shared goal for Glasgow to work towards. It is not prescriptive, and not intended to work as a 'map', but rather as a 'compass'. These ideas, and possibilities, are intended to inspire changemakers, organisations and individuals to adopt the Portrait's principles in their professional work and personal lives. Through the next phase of the Thriving Cities Initiative and GALLANT research programme, changemakers across the city will have the opportunity to co-create action pathways towards "thriving" and use indicators to measure progress.





iii THE GLASGOW DOUGHNUT

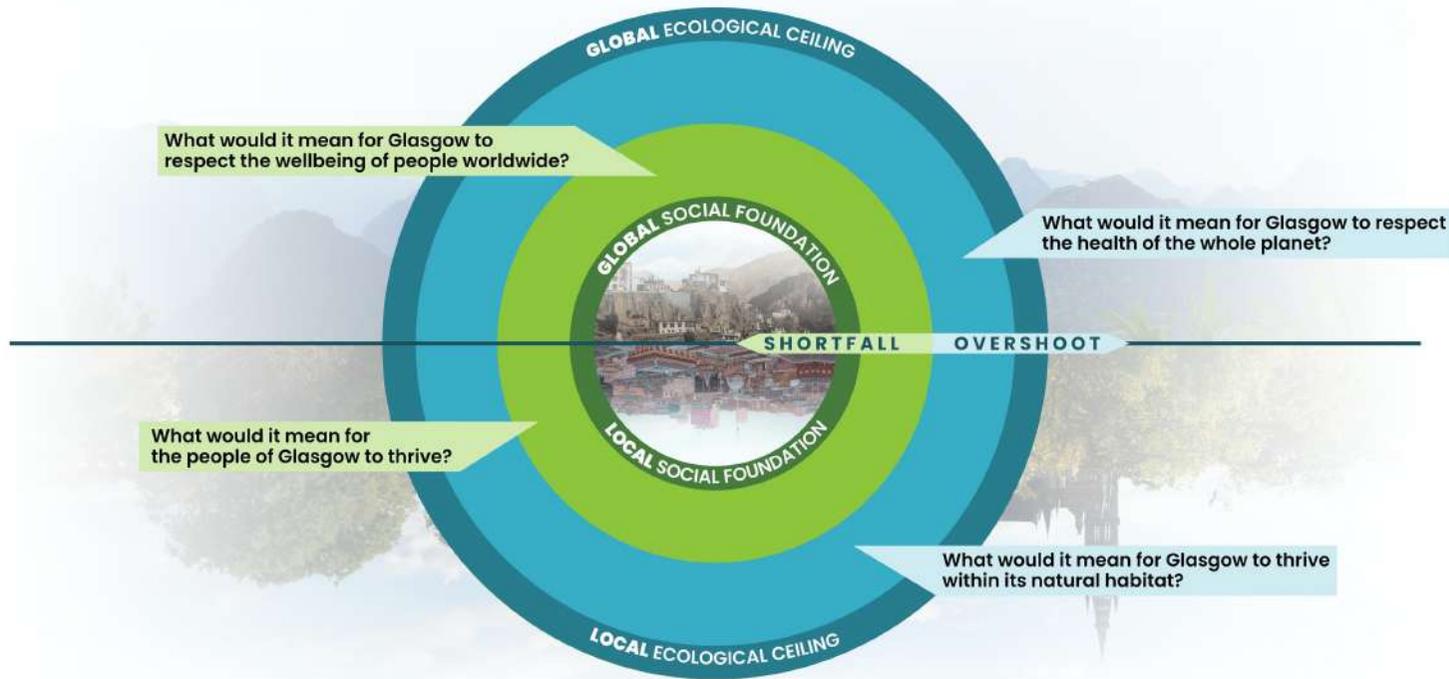


Diagram iii.1: The Thriving Glasgow Doughnut with the questions of the four Portrait lenses.



GLASGOW'S DEFINITIONS

LOCAL - SOCIAL

LOCAL SOCIAL LENS



FOOD	Everyone in Glasgow has affordable access to nourishing and sustainable food. There is no food poverty, and no need for food banks.
WATER	Everyone's water requirements are met - clean, treated water for drinking, cooking and hygiene is readily available.
HEALTH	All citizens live long healthy lives, and health inequalities are small. The environment promotes physical/mental health & enhances wellbeing.
EDUCATION	A well-funded education system gives equal access to all Glaswegians for the foundation of life-long opportunity and fulfilment.
HOUSING	Homes for all residents, in all tenures, are affordable, secure, energy efficient, and free from health hazards.
ENERGY	All of Glasgow's energy needs are met from renewable sources. Everyone is able to afford their energy requirements.
CONNECTIVITY	All citizens have equal access to fast, affordable broadband and are supported in accessing online communication networks and internet.
MOBILITY	It is easy, safe and affordable for Glaswegians and commuters to get around the city sustainably at all times of the day.
COMMUNITY	All Glaswegians have opportunities to take an active role in their communities, supporting vital community connection and services.
CULTURE	All people enjoy a healthy 'work-life' balance with lots of opportunity for affordable and inclusive cultural, leisure and wellbeing activities.
INCOME & WORK	All Glaswegians have sufficient income from a sustainable/fulfilling source. There is zero poverty in the city.
SOCIAL EQUITY	Citizens are valued equally & all Glasgow's communities benefit from inclusive access to, and representation in, city spaces and institutions.
EQUALITY IN DIVERSITY	All Glaswegians, regardless of background or culture, have equal opportunities and access to everything Glasgow has to offer.
POLITICAL VOICE	Glasgow takes an inclusive and proactive approach to policy and decision making.
PEACE & JUSTICE	Glasgow prioritises and resources residents' safety, peace, and protection.



GLASGOW'S DEFINITIONS



LOCAL - ECOLOGICAL

CLEANSE THE AIR	All Glasgow citizens breathe healthy and unpolluted air, and pollutants are well below maximum statutory guidelines for health.
HOUSE BIODIVERSITY	Glasgow and its surroundings have abundant and diverse local populations of native species.
STORE CARBON	Glasgow stores more carbon in its trees, soils, greenspaces, and waterways than it releases. It maintains its natural carbon sinks.
CYCLE WATER	Glasgow maximises opportunities for grey water recycling, rainwater harvesting, and manages wastewater sustainably.
HARVEST ENERGY	The Glasgow energy mix is harvested from renewable sources to benefit Glasgow residents and businesses.
TEMPERATURE REGULATION	Considered design of the natural and built environment in Glasgow creates a balance of green, grey, and blue spaces that contribute to temperature regulation.
BUILD & PROTECT SOIL	Soil in Glasgow is healthy, nutrient-rich, and fertile, which supports healthy biodiversity, food growth, and diverse green spaces.
ENHANCE WELLBEING	Green and blue spaces across Glasgow are plentiful, pleasant, accessible to all, and clean.





GLASGOW'S DEFINITIONS

GLOBAL - SOCIAL

GLOBAL SOCIAL LENS

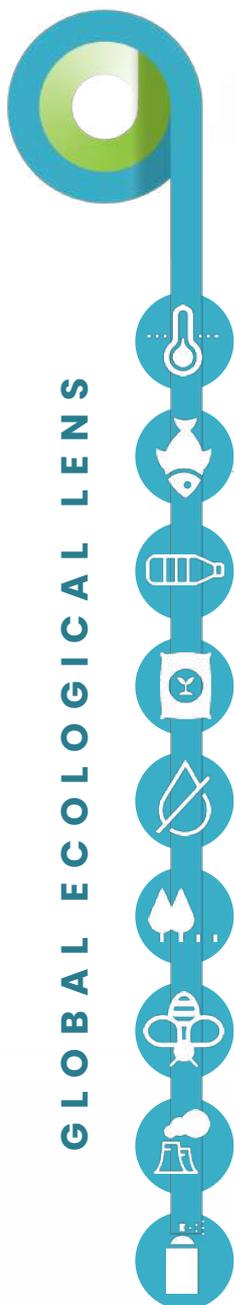


FOOD	Glasgow supports a human rights approach to food for all.
WATER	Glasgow does not use more than its fair share of water, either directly or indirectly (through imported goods).
HEALTH	Glasgow acts to improve global health and wellbeing, and does not exacerbate existing threats through the working and industrial practices in its supply chains and recruitment practices.
EDUCATION	Glasgow supports and advocates for equal rights and access to education for all global populations.
HOUSING	Glasgow does not contribute to conditions that threaten the stability and security of places and materials for global communities.
ENERGY	Glasgow uses and produces energy in ways that contribute to global Net Zero ambitions, and is considerate in its direct and indirect use of energy to minimise global energy consumption.
INCOME & WORK	Glasgow supports Fair Trade principles and good working conditions for all workers involved in its supply chains.
SOCIAL EQUITY	Glasgow takes responsibility as a Global North city to raise living standards worldwide, and reduce global inequalities.
EQUALITY IN DIVERSITY	Glasgow is welcoming to all people from all cultures and delivers healthy cultural inclusion. Glasgow's activities do not support or uphold regimes with poor human rights records.
COMMUNITY NETWORKS	Glaswegians act as 'global citizens' to build community and solidarity worldwide.
POLITICAL VOICE	Glasgow sets a leading example of free, inclusive and intergenerationally just democratic engagement in political decisions.
PEACE & JUSTICE	Glasgow ensures representation, inclusion, and protection of the rights of those most vulnerable to the effects of climate change.





GLASGOW'S DEFINITIONS



GLOBAL ECOLOGICAL LENS

GLOBAL - ECOLOGICAL

CLIMATE CHANGE	Glasgow has no net contribution to global greenhouse gas emissions.
OCEAN ACIDIFICATION	Glasgow contributes to protecting global oceans by having no net contribution to greenhouse gas emissions.
CHEMICAL POLLUTION	Glasgow is committed to minimising its material footprint. Glasgow has a Circular Economy that maximises re-use of resources & minimises its use of harmful chemicals across sectors & supply chains.
FERTILISER USE	Farming practices in Glasgow's global supply chains are effective in minimising reliance on excessive fertiliser use.
FRESHWATER WITHDRAWALS	Glasgow contributes to a sustainable and fair global water footprint.
LAND CONVERSION	Glasgow's supply chain is built upon transparent and sustainable land use practices, ensuring responsible and accountable land management.
BIODIVERSITY LOSS	Glasgow uses its political influence and convening power to facilitate awareness raising, evidence generation and debate around biodiversity solutions.
AIR POLLUTION	Glasgow supports and requires activity in the city and its supply chains to eliminate contributions to global air pollution.
OZONE LAYER DEPLETION	Glasgow avoids using ozone-depleting chemicals and gases, and contributes to the development of alternatives through research and development.



1 INTRODUCTION

The Thriving Glasgow Portrait presents a collective vision of Glasgow as a thriving city and provides an important set of goals which progress can be measured against. Glasgow has set out its ambition to become a Green Wellbeing Economy – a challenging but vital target for long-term prosperity. The goal involves making progress on human wellbeing and social equality, while also reducing ecological harms and supporting sustainable, climate-friendly practices.

In this Portrait, we use a framework known as ‘Doughnut Economics’ to explore what that means specifically for our place. The Doughnut framework asks how the people of Glasgow can thrive while also being globally responsible citizens, securing the wellbeing of people and planet both now, and for future generations.

The work of the Thriving Glasgow Portrait has been undertaken by a team of cross-disciplinary researchers at the University of Glasgow, in close partnership with Glasgow City Council, including Sustainable Glasgow. A wide range of Glasgow’s organisations and community members contributed to the Portrait’s creation. Glasgow’s Portrait follows the methodology set out by partner organisations [C40 Cities](#) and [Doughnut Economics Action Lab](#) (DEAL), who have supported the process throughout.

Through the Portrait, Glasgow joins a global network of cities that are considering new and innovative ways to aim for, and to measure, thriving. These new approaches recognise that many of the traditional measurements of ‘success’, such as GDP, do not measure the things that we most value (e.g., wellbeing, green spaces, social connection).

This Portrait aims to look beyond traditional, easily measured components of economic performance, to find meaningful goals and ambitions that respond to 21st-century challenges. We are facing a climate crisis alongside huge social upheavals (such as the pandemic, military conflict, cost of living crisis, and rising inequality). These challenges are closely interlinked, so our solutions need to be ambitious and consider the whole system.

The vision presented in this Portrait is relevant for all sectors, across the whole city. It suggests ways of thinking and working in systems that could lead to improved, sustainable wellbeing for both people and planet.



1.1 WHAT IS THE DOUGHNUT?

The Thriving Glasgow Portrait provides a way of understanding Glasgow in terms of the Doughnut Economics framework.

DOUGHNUT ECONOMICS

The Doughnut Economics framework offers **a compass for human prosperity in the 21st Century**, conceptualised by the economist Kate Raworth. Its Doughnut shape comes from the two circular 'limits' and suggests that living within those limits offers humanity a way to meet the needs of all people, within the means of the living planet.

The inner circle, the **social foundation**, represents a floor that human beings cannot fall below (or fall into the hole) without experiencing suffering or deprivation. This foundation includes the essentials needed for a thriving life. It represents not just survival – things we need to stay alive and well – but also the things that make life worth living.

The outer ring, or limit, is the **ecological ceiling** – the natural boundaries of our planetary home. To go over, or beyond, the ecological ceiling, represents an unsustainable pressure on earth's resources. Ecological overshoot threatens the very conditions on our planet that create enough stability for life to flourish.

Human prosperity is only possible in a flourishing living world, and the Doughnut recognises that the economy is embedded within, and dependent upon, both our social structures and the natural Earth systems.

The dimensions of the social foundation are taken from the UN's [Sustainable Development Goals](#), and the ecological ceiling components come from the [Planetary Boundaries](#) framework. It brings them together in a single framework, creating the **safe and just space for humanity** that lies between the two sets of metrics. That goal is the green inner ring of the Doughnut.

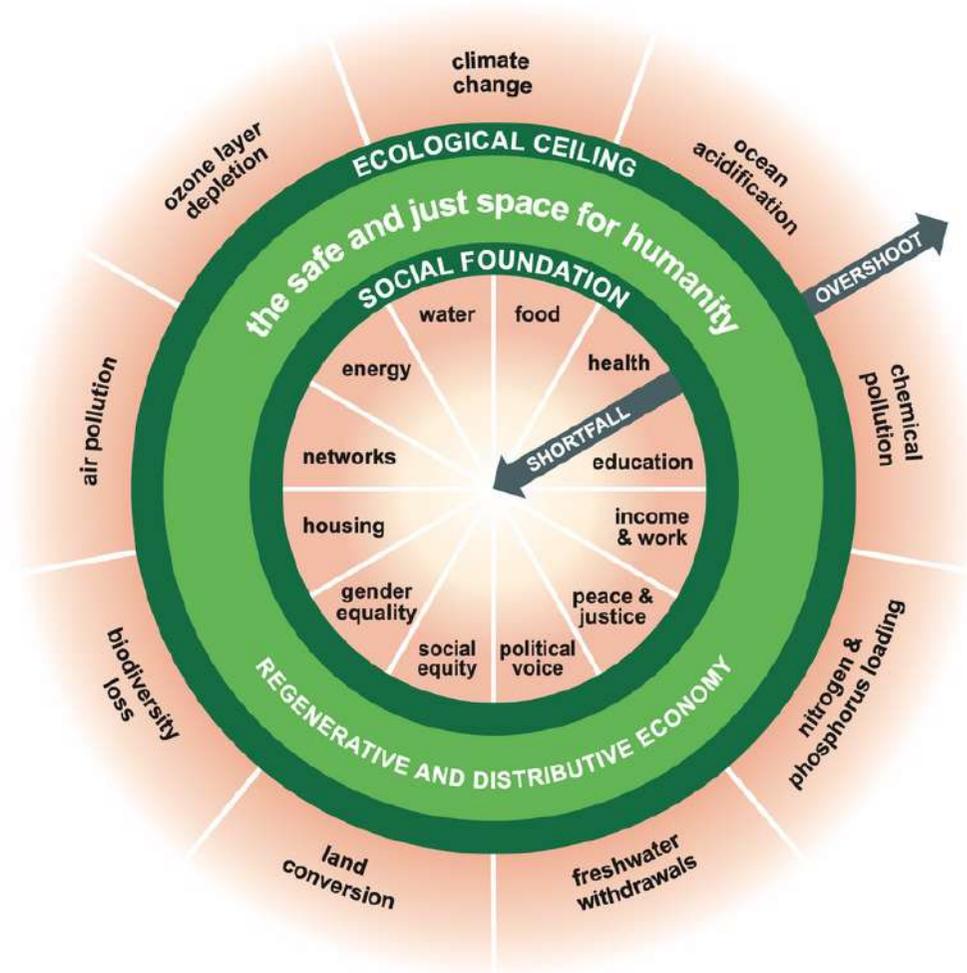


Diagram 1.1.1: The Doughnut of Social and Planetary Boundaries (Raworth, 2017)



DOWNSCALING THE DOUGHNUT IN GLASGOW

The Doughnut asks how *humanity* can thrive, and in the Portrait process, we ask **‘what would it mean for Glasgow to thrive?’** In social and ecological terms, what would a thriving Glasgow look like? The Portrait tries to answer this question holistically, considering different perspectives on wellbeing and bringing them together.

To consider the Doughnut framework more locally, from a city’s perspective, we ‘unroll’ it and break it down into **four lenses**.

The [Portrait methodology](#) has been used internationally by progressive city governments, community groups, academics, activists, and policymakers, depending on the location (for example, Amsterdam, Brussels, Nanaimo, Melbourne, Barcelona).

In Glasgow, several different groups and sectors have contributed to the creation of this Portrait, and it is hoped that even more will get involved now it has been published. A truly diverse ‘Glasgow Doughnut Coalition’ will be needed, bringing together many different types of knowledge, understanding, and expertise, in order to both set the parameters, and make the necessary progress, to achieve the overarching goal of getting Glasgow into the Doughnut.

Each of the four lenses, which are distinct but interconnected, deals with a slightly different definition of social or ecological wellbeing, from either a local or a global point of view.

Local–Ecological

The local–ecological lens asks how to make the most of Glasgow’s surrounding natural ecosystems. How can we work with the wetlands of the Clyde, and all the native wildlife and biodiversity, or use our weather systems, in ways that allow the city to replicate the generosity of nature’s functions?

Local–Social

This lens asks how all the people of Glasgow can thrive – how can everyone’s essential social needs be met in a way that is fair, and that considers the particular strengths and challenges of Glasgow’s local–social context?

Global–Ecological

This lens asks us to think about the activity of our city and its environmental impact on the rest of the world, from things like burning fossil fuels, or the chemicals and pollution that are embodied in the products Glasgow imports and then the streams of waste that come out. How can we reduce our impact on global resources so we don’t use more than our fair allocation, or contribute more than our share of harm?

Global–Social

In the global–social lens, we ask how we can respect the wellbeing of people worldwide, and how our interactions in this interconnected world could be either harmful or beneficial to our fellow global citizens. What can we do here to build solidarity globally, and where do we risk undermining it?



Diagram 1.1.2: The Unrolled Doughnut split into four lenses.



1.2 THE PORTRAIT QUESTION

How can Glasgow become a home to thriving people in a thriving place, while respecting the wellbeing of all people and the health of the whole planet?

The Thriving Glasgow Portrait suggests a future for the city that balances local aspirations with global responsibility. The Portrait framework can be used to think about where we are already making progress towards this ambition, and where we still have work to do.

The four Portrait lenses are intended for organisations across different sectors, communities, and neighbourhoods to frame their own work in a more holistic way. This report suggests ways of thinking about Glasgow from new, more interconnected perspectives, using the dimensions of the Doughnut. For social concerns, the framework brings in the related ecological factors that need to be considered. Vice versa, for ecological priorities, using the Doughnut brings in important social perspectives, and shows where unintended consequences may emerge.

The City Portrait provides a framework for acting on social and ecological priorities in tandem, as well as a consistent focus on reducing inequalities. Adopting its principles, and implementing policies that support its ambitions, will make significant progress on that shared goal of reaching a state of 'Thriving'.



1.3 POLICY CONTEXT

The ambition to get Glasgow into the Doughnut is one that supports Scotland's national goals and progress towards becoming a Wellbeing Economy – an economy that aims for, and measures, the things that make us thrive. As a founding member of the [Wellbeing Economy Governments](#) (WEGo) Partnership, Scotland joins New Zealand, Iceland, Finland, and Wales, in seeking sustainable economic transformation. The reshaped economies of WEGo countries intend to deliver just transitions to nature positive, net zero societies, based on principles of equity, prosperity, and resilience.

Scottish ambitions are outlined in the [National Performance Framework](#) (which aligns closely with the SDGs), its [Wellbeing Economy Monitor](#), and the work of the [Just Transition Commission](#). The Doughnut Economics framework is well positioned to support the principles informing these initiatives.

The Thriving Glasgow Portrait project supports Glasgow's ambitions to become a Green Economy, and builds on extensive existing work that has been going on across many different sectors in the city. The Portrait is an extension of the ongoing partnership work and collaboration between the 'Town and Gown' institutions of the City Council and the University of Glasgow.

This partnership combines the research ability of the University with the political and practical know-how of the Council, in order to design well-informed and well-grounded solutions to the social and ecological challenges the city faces.

This collaborative work follows Glasgow's series of [Green Recovery Dialogues](#), which took place in late 2020 to discuss sustainable and equitable approaches to recovering from the COVID-19 pandemic. Policy Scotland hosted academics, policy actors, practitioners and a variety of subject matter experts to discuss the complexity of these interrelated issues, and set out some important priorities for action. The themes of the dialogues ('Implementing Green Futures', 'Raising Ambition on Net Zero', and 'Rethinking Consumption') are well matched to the ideas and priorities underpinning the social-ecological balance that the Doughnut sets out to achieve.

Glasgow launched its participation in the [Thriving Cities Initiative](#) (TCI) during COP26, and joining TCI is a key component of Glasgow's COP legacy. The Thriving Cities Initiative is a programme initiated by C40 Cities, which supports cities in shifting towards more equitable and sustainable consumption. TCI aims to demonstrate how cities can co-create regenerative systems and powerful narratives to inspire behaviour change for all people to be able to thrive within planetary limits.

With support from C40 Cities and the Doughnut Economics Action Lab (DEAL), Glasgow City Council and University of Glasgow researchers are applying these principles through the Portrait.

Glasgow has set an ambitious goal to reach Net Zero by 2030, and has published several strategies and policy documents that target action on the climate and ecological crises. As a commitment of the Glasgow Climate Plan, the Glasgow Green Deal lays out the city's mission to 2030, and is guided by three interlinked objectives:

- reducing carbon emissions and building resilience to the impacts of climate change
- creating prosperity, sustainable jobs and high-quality places
- eliminating poverty and deliver justice through inclusion and equality





A key feature of the Doughnut framework is the way it presents social and ecological performance in the same view. Glasgow is already doing a lot of work that relates to both the inner and outer rings of the Doughnut, and the Portrait brings these different elements together, to support thinking about the different strategies and interventions more broadly, and in the right context. It also highlights Glasgow's responsibilities to global citizens, who are affected by the decisions we make, and actions we take, here in Glasgow.

The Portrait offers a holistic framework to support all of these ambitions. The goals of different policy departments, from transport, to food, to education, to biodiversity, are distinct, but closely connected. By placing activities across the city in the context of the Doughnut framework, different departments, and different parts of the system, may find a shared reference point that guides each set of actions and decisions towards a shared vision for prosperity.

Glasgow's Portrait is a tool that can guide both strategic thinking, and practical action. It is intended to offer a common starting point and shared vision on wellbeing and sustainability that brings together multiple parts of Glasgow's policy system. The Portrait offers common threads to link actors and priorities across the city, to spark the big-picture, joined-up thinking and collaboration between changemakers that is necessary for whole-system transformation.

The Thriving Glasgow Portrait marks one of the first outputs of both the Thriving Cities Initiative, and the 5-year, £10.2 million **GALLANT research programme** (Glasgow as a Living Lab Accelerating Novel Transformation). Funded by UKRI NERC as part of their Changing the Environment investment, University researchers are helping the city move towards climate resilience whilst tackling health, social and economic inequalities. GALLANT aims to deliver the social priorities of the UN Sustainable Development Goals while remaining within the planetary boundaries of a 1.5°C world - using Doughnut Economics as a framework.

Together, making use of tools such as the Portrait to support the city's existing priorities, and adopting these lessons in the future work of GALLANT, will allow for voices from many different sectors and communities across the city to feature in the vision and creation of a Thriving Glasgow.

MAY 2019

Glasgow City Council declares a climate and ecological emergency

JUN 2020 - FEB 2021

Green Recovery Dialogues (GRDs) take place between Council, University, and Practitioner partners 'From Covid-19 to COP26: Forging a just and sustainable transition'

OCT - NOV 2021

Glasgow hosts COP26 in the city

NOVEMBER 2021

Glasgow launches its participation as a pilot city in C40 Cities' 'Thriving Cities Initiative'

JANUARY 2022

GALLANT receives successful £10.2 million funding outcome from NERC (Natural Environment Research Council)

APRIL 2022

Glasgow announced as one of the EU Mission cities, aiming to become 'climate neutral and smart cities by 2030'

APRIL 2022

Thriving Glasgow Portrait workshops begin



2 THE PORTRAIT PROCESS

Along with an initial phase of desk-based research, a series of [workshops](#) and engagement activities have informed the Thriving Glasgow Portrait. These workshops have included the expertise and perspectives of many different groups and sectors. All the various workshop participants had their own particular understandings of our city system, and their own important expertise and insights to share.

During the research process, our picture of Glasgow has grown richer, and the iterative nature of the engagement has allowed us to build a broad and comprehensive understanding of what 'Thriving' means in Glasgow's context. The thriving definitions that are presented in each of Glasgow's four Portrait lenses are informed by the several layers of review and engagement that have been done with both researchers and changemakers.



Jan-Apr 2022

Desk-based
Portrait of
Place



Apr 2022

First workshop
(Glasgow City
Council officers)



Aug 2022

GALLANT academics
– getting into the
doughnut with
GALLANT



Sept 2022

Community
Portrait
(ARCadia)



Oct 2022

Workshop with
GCC elected
members



Feb 2023

Multi-sector
stakeholder
workshop



DESK-BASED RESEARCH

The Thriving Glasgow Portrait is made up of information from several different sources. To begin with, using an approach outlined by [DEAL](#), we reviewed a number of Glasgow’s existing policies and strategies, picking out relevant targets and ambitions (some closer than others to the specific dimensions of the Doughnut). Glasgow has published several relevant, specific plans, including:

- Glasgow City Food Plan
- Local Biodiversity Action Plan
- Glasgow Transport Strategy
- Glasgow Climate Plan
- Circular Economy Route Map for Glasgow

For each of the local lenses we identified one specific target for each dimension. In the global lenses, we also used the Planetary Boundary limits and Sustainable Development Goals to set out the relevant aspirations for wellbeing of people and planet. Having a broad selection of existing targets gave us an initial understanding, in terms of the four Portrait lenses, of what Glasgow’s current vision for itself as a thriving place might involve.

We then compared the targets to publicly available statistics, to give us a sense of where our current strengths might lie, as well as to show some of our biggest challenges. For example, although targets exist to improve health and reduce health inequalities, this remains one of the city’s largest and longest-lasting issues. Many of the desk-based snapshot indicators showed a big gap between where Glasgow wants to go, and where it is now.

Each lens incorporates various dimensions of wellbeing, and is informed by different sources of information. Due to the breadth of areas the Portrait covers, there is a lack of precise or standardised data. Instead, a more heuristic approach was required, and metrics of ‘best-fit’ were identified. Through a series of peer-to-peer discussions, the Glasgow team learnt from and adapted the work of other researchers grappling with this emerging science (see, for example, the [Leeds Doughnut full report](#)).

The initial material from the Desk-based Portrait is available as an appendix to this report.

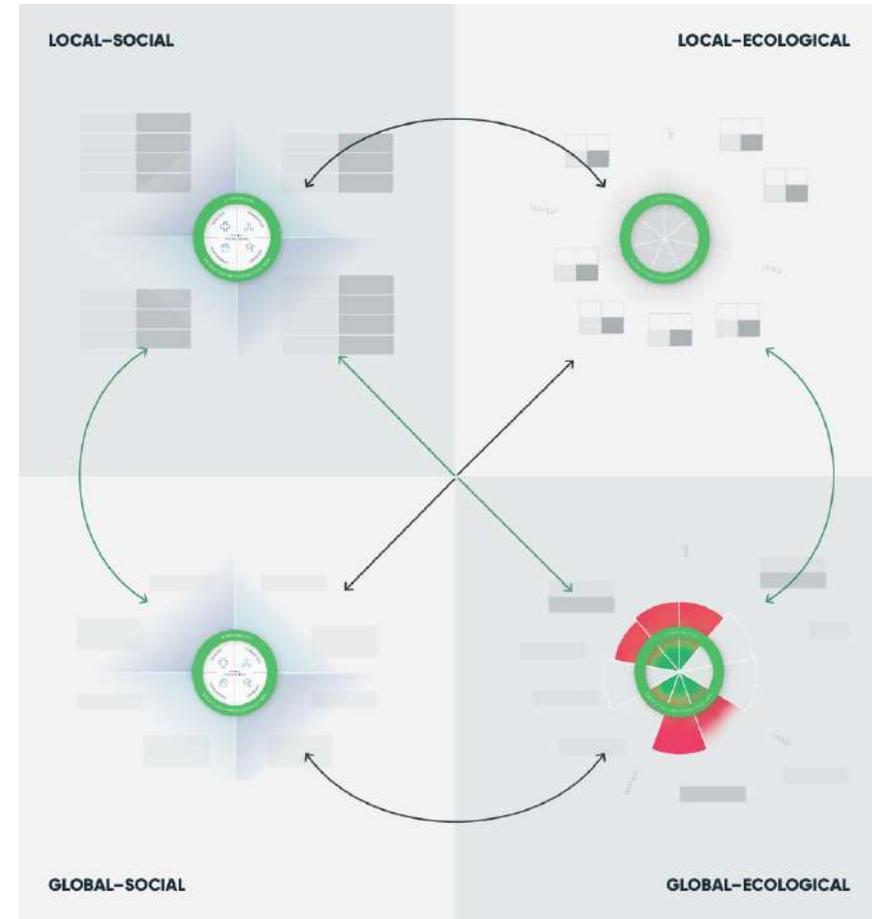


Diagram 1.2.1: Sample four lens worksheet from the original TCI methodological guide: [Creating City Portraits](#) (Thriving Cities Initiative, 2020).



STAKEHOLDER WORKSHOPS

To bring this desk-based picture of the city to life, we held a number of workshops throughout 2022 and early 2023, consulting with different stakeholders about what the portrait lenses mean to them, both professionally and personally. This process has enriched the information collected for the data portrait, allowing us to incorporate participant responses to the thriving definitions.

These workshops were held with people who work across the public, private and third sectors in Glasgow. We worked with public servants, City Councillors, academics, community members of different ages, social enterprises, commercial entities, and scientists to ask that Portrait question more widely: 'What does a thriving Glasgow mean to you?'

In the workshops, we asked participants to think about the individual lenses (Local-Social, Local-Ecological, Global-Ecological, and Global-Social) and what a thriving Glasgow would look like within each lens. We used the existing targets and indicators as inspiration, but we took these ideas further in the workshop settings, asking the participants to think big. From these diverse perspectives on visions for a future Glasgow, the Portrait tries to show what 'getting into the Doughnut' might mean for people here.

'Thriving' within the four lenses of the Portrait will mean something different to everyone. By asking the question widely, with different groups of people, these workshops have tried to capture many of the hopes for Glasgow's future that are shared across the city.

Insights from these workshops have led to a set of thriving definitions for Glasgow – definitions that go beyond existing city strategies, and instead offer a response to what the four Thriving Glasgow Portrait lenses might look like if Glasgow was to achieve its ambition of becoming a Thriving City.

The **Thriving Definitions** that make up Glasgow's Portrait are presented in the following section and are formed by amalgamating and summarising the many different responses to the Portrait question in each lens. The full Portrait comprises 44 dimensions, so it presents a broad, holistic, aspirational view of how Glasgow could look in the future.

Image 2.1: Photographs taken during the Thriving Glasgow Portrait Stakeholder Workshops (right).





3 THRIVING GLASGOW: THE DEFINITIONS

In the following pages, the four Thriving Glasgow Portrait lenses are presented in detail.

Each of the 44 dimensions fits the following structure:

- **Glasgow's definition of Thriving** – a core, succinct definition of what the ideal 'state' would be for Glasgow as a Thriving City
- **What this could look like** – more detailed examples of some of the enabling factors and conditions that could support progress towards the overall vision





3.1 LOCAL-SOCIAL LENS (DETAILED)

	1 FOOD	2 WATER	3 HEALTH	4 EDUCATION	5 HOUSING
GLASGOW'S DEFINITION OF THRIVING	Everyone in Glasgow has affordable access to nourishing and sustainable food. There is no food poverty, and no need for food banks.	Everyone's water requirements are met – clean, treated water for drinking, cooking and hygiene is readily available.	All Glasgow citizens live long and healthy lives, and health inequalities are small. Glasgow's environment promotes physical health, enhances wellbeing, and supports good mental health.	A well-funded education system (schools, colleges, universities) gives equal access to all Glaswegians for the foundation of life-long opportunity and fulfilment. Everyone in Glasgow is supported to realise their potential.	Homes for all residents, in all tenures, are affordable, secure, energy efficient, and free from health hazards.
WHAT THIS COULD LOOK LIKE	Local community food growing and food sharing initiatives are widespread, and healthy food options are more accessible and affordable than ultra-processed options.	Water resilience is improved by not over-using clean, treated water (so needing fewer chemicals) for growing, gardening, washing, cleaning etc.	Everyone lives in a health-promoting environment, without contaminated soil and polluted land posing a health threat to residents, and with high quality green space to enjoy, clean air, active travel routes and plentiful cycle storage to allow for physical activity. Glasgow no longer has disproportionate levels of excess deaths from substance abuse or suicide.	All children are attending school and are able to benefit from learning without the additional challenges of poverty, such as hunger. Education providers help Glaswegians to become good climate citizens through a curriculum that emphasises teaching the value of biodiversity and a healthy ecosystem for human prosperity. Education providers actively support healthy meals, low-carbon travel and physical activity.	Glasgow's architectural heritage (tenements) is celebrated, but also possible to modernise/retrofit. Glasgow builds and regenerates more beautiful, low-carbon social housing. The interests of residents are prioritised over the profit of landlords. There is widespread city support for national level housing reform that provides sustainable methods of tackling rising Private Rental Sector inflation. Housing services and social landlords provide additional co-benefits to communities e.g. green spaces, local food growing, community pantries.



3.1 LOCAL-SOCIAL LENS (DETAILED)

	6 ENERGY	7 CONNECTIVITY	8 MOBILITY	9 COMMUNITY	10 CULTURE
GLASGOW'S DEFINITION OF THRIVING	<p>All of Glasgow's energy needs are met from renewable sources. Everyone is able to afford their energy requirements.</p>	<p>All citizens in Glasgow have access to fast, affordable broadband and are supported in accessing online communication networks and the internet. There are no digital inequalities by age, wealth or education status.</p>	<p>It is easy, safe and affordable for Glaswegians and commuters to get around the city sustainably at all times of the day.</p>	<p>Glasgow is a friendly and welcoming city. All Glaswegians have opportunities to take an active role in their communities, supporting vital community connection and services.</p>	<p>People in Glasgow enjoy a healthy 'work-life' balance with lots of opportunity for cultural, leisure and wellbeing-promoting activities that are both affordable and inclusive.</p>
WHAT THIS COULD LOOK LIKE	<p>Glasgow's energy consumption (direct and indirect) is much reduced overall, in particular by combining energy efficiency measures with decarbonising heating, and reducing the consumption of high-consumption industries and individuals.</p> <p>More renewable energy infrastructure is locally owned and managed within Glasgow and surrounding communities, generating community wealth.</p>	<p><i>Workshop discussions did not cover further detail.</i></p>	<p>Glasgow's compact, liveable neighbourhoods with access to key infrastructure and services are connected by a cheap, decarbonised, fully integrated public transport system that provides a regular service throughout the day and night. Glasgow is well connected to other cities and rural areas.</p>	<p>There are widespread community sharing initiatives and communal resources such as material exchange hubs and 'libraries of things', for tools, toys, and gardening equipment. More people have the ability take part in volunteering. There are plenty of community spaces available for use in all seasons, and opportunities for local communities to act as stewards of these spaces.</p>	<p>Our cultural assets such as museums and creative spaces contribute to wider city ambitions, such as job creation.</p>



3.1 LOCAL-SOCIAL LENS (DETAILED)

	11 INCOME & WORK	12 SOCIAL EQUITY	13 EQUALITY IN DIVERSITY	14 POLITICAL VOICE	15 PEACE & JUSTICE
GLASGOW'S DEFINITION OF THRIVING	All Glaswegians have sufficient income from a sustainable/fulfilling source. There is zero poverty in the city.	All Glasgow citizens are valued equally, and all Glasgow's communities benefit from inclusive access to, and representation in, city spaces and institutions.	Glasgow recognises and celebrates the diversity of its communities. All Glaswegians, regardless of background or culture, have equal opportunities and access to everything Glasgow has to offer.	Glasgow takes an inclusive and proactive approach to policy and decision making.	Glasgow prioritises and resources residents' safety, peace, and protection.
WHAT THIS COULD LOOK LIKE	<p>Job growth areas are in sustainable industries such as renewable energy, culture, and wellbeing services. Long-term investment is made in the skills and training to support these good quality jobs.</p> <p>Glasgow invests in and supports (through tools such as procurement) alternative business models e.g. social enterprises and cooperatives.</p> <p>Glasgow residents are connected to high quality employment opportunities e.g. through accessible transport options and inclusive recruitment practices.</p>	<p>Dramatic improvement and investment in the fabric of historically poorer areas, improving access to and ownership of 'The Commons' across all communities. Glaswegians act as stewards of public resources for the benefit of future generations.</p> <p>Vacant and Derelict Land (VDL) sites in deprived areas are regenerated to provide amenities (natural, cultural, social, economic) to those who most need them. Policy levers are employed to protect against gentrification.</p> <p>Patterns of intergenerational poverty are broken.</p>	<p>The diversity of all Glasgow's neighbourhoods is celebrated and reflected in our decision-making and services e.g. through different languages. Services and city spaces are used equally by all groups in society - ethnic diversity and gender equality - reflected for example in patterns of active travel.</p>	<p>Our political processes are informed by more inclusive citizen participation and engagement, valuing all voices including quiet ones (of different ages and backgrounds too). Public spaces and tools such as citizens' assemblies are used to encourage more community engagement, and our political leaders demonstrate that they can be trusted.</p>	<p>Neighbourhoods are safe and peaceful in all parts of the city, all individuals feel protected, and trust that resources are available to keep them safe e.g. in parks and greenspaces.</p>



3.2 LOCAL-ECOLOGICAL LENS (DETAILED)

	16 CLEANSE THE AIR	17 HOUSE BIODIVERSITY	18 STORE CARBON	19 CYCLE WATER
GLASGOW'S DEFINITION OF THRIVING	All Glasgow citizens breathe healthy and unpolluted air, and pollutants are well below maximum statutory guidelines for health.	Glasgow and its surroundings have abundant and diverse local populations of native species.	Glasgow stores more carbon in its trees, soils, greenspaces, and waterways than it releases. It maintains and protects its natural carbon sinks.	Glasgow recognises the value of clean water. It maximises opportunities for grey water recycling, rainwater harvesting, and manages wastewater sustainably. The rivers are free from pollution and support healthy biodiversity.
WHAT THIS COULD LOOK LIKE	<p>Glasgow has active travel infrastructure, Low Emission Zones, urban trees and plants in public, private and commercial spaces. Its emissions from construction, transport and industry are minimised.</p> <p>Glasgow uses its policy levers to support widespread capture of pollutants, at individual and industrial levels.</p>	<p>Biodiversity protection and restoration is properly resourced, and built in to all other planning priorities. Crucial pollinators and worms are protected. There are well-connected habitats and wildlife corridors.</p> <p>City parks and waterways are managed holistically, to join up wildlife habitats. Vacant and derelict land sites can be assessed for biodiversity improvement. This may include protecting some mature derelict sites that support rare species or encourage returning biodiversity.</p> <p>Adequate training opportunities are available to citizens of all ages to improve skills in managing green spaces for biodiversity. Rewilding is encouraged in the city, maintenance teams do not cut back grass verges, and several wildflower meadows are planted.</p>	<p>Heating, transport, and construction sectors are decarbonised, through use of Nature-Based Solutions, the use of net zero construction materials, and repurposing of industrial infrastructure for carbon sequestration. Glasgow supports the restoration of carbon sinks across the wider region e.g., peatlands, seagrass.</p>	<p>Glasgow makes efficient use of untreated water (needing fewer chemicals) for growing, gardening, washing, and cleaning.</p> <p>Green infrastructure, nature-based solutions, and sustainable urban drainage systems are widely used.</p> <p>Urban design practices embrace adaptation through rain gardens, flood plains, more permeable surfaces (to reduce pollutant run-off), and healthy river corridors that can also provide wildlife habitat.</p>



3.2 LOCAL-ECOLOGICAL LENS (DETAILED)

	20 HARVEST ENERGY	21 REGULATE THE TEMPERATURE	22 BUILD & PROTECT SOIL	23 ENHANCE WELLBEING
GLASGOW'S DEFINITION OF THRIVING	<p>The Glasgow energy mix is harvested from renewable sources to benefit Glasgow residents and businesses. Glasgow pursues renewable energy generation and storage solutions.</p>	<p>Considered design of the natural and built environment in Glasgow creates a balance of green, grey, and blue spaces that contribute to temperature regulation.</p>	<p>Soil in Glasgow is healthy, nutrient-rich, and fertile, which supports healthy biodiversity, food growth, and diverse green spaces.</p>	<p>Green and blue spaces across Glasgow are plentiful, pleasant, accessible to all, and clean.</p>
WHAT THIS COULD LOOK LIKE	<p>Glasgow maximises opportunities to use solar, wind, water, and ground source heat for its energy, distributed through local heat networks.</p> <p>More approvals are granted for solar power and low-carbon energy infrastructure on publicly owned buildings. All new buildings fitted with solar panels and zero carbon heat sources.</p> <p>Glasgow explores new methods of generating and storing renewable energy e.g., kinetic energy, harvesting 'Park Power' from parks and open spaces.</p>	<p>More urban green spaces are created to achieve a better balance between 'urban' and 'natural' spaces. Small spaces are maximised for plants and trees e.g. pocket street parks.</p>	<p>Impermeable hard surfaces are minimised and replaced with permeable surfaces. Spaces are provided to support soil health through composting, regenerative agriculture, and hosting biodiversity.</p> <p>Vacant and Derelict Land sites need to be decontaminated and transformed in pursuit of soil health.</p> <p>Sites of Special Scientific Interest (SSIs) need to be conserved.</p>	<p>Glasgow's open spaces are multi-purpose: they can be used for leisure and as 'green gyms'; as community venues; and to provide connection with nature. The local community are engaged in the upkeep and stewardship of green and blue spaces, and benefit from its results.</p> <p>Support is provided to build capacity for volunteering. Currently polluted, vacant or derelict green and blue sites (including potential swimming spots) are prioritised for transformation, even if temporarily. The Glasgow Clyde Valley Green Network blueprint is enacted.</p>



3.3 GLOBAL-SOCIAL LENS (DETAILED)

	24 FOOD	25 WATER	26 HEALTH	27 EDUCATION
GLASGOW'S DEFINITION OF THRIVING	Glasgow supports a human rights approach to food for all.	Glasgow does not use more than its fair share of water, either directly or indirectly (through imported goods).	Glasgow acts to improve global health and wellbeing, and does not exacerbate existing threats to health and wellbeing through the working and industrial practices in its supply chains and recruitment practices.	Glasgow supports and advocates for equal rights and access to education for all global populations.
WHAT THIS COULD LOOK LIKE	<p>Glasgow does not import food for consumption here at the expense of more distant communities. Glaswegians do not consume unsustainable amounts of food that global populations rely on e.g. quinoa, nor foods that cause deforestation e.g. beef, avocados.</p> <p>Local and low-carbon food production is supported to ease pressure on the global agricultural system. Information is made easily available about healthy and sustainable diets e.g. methods and benefits of switching to primarily plant-based food.</p>	<p>Glasgow does not deplete global water supplies by importing unsustainable amounts of products that use water intensively, such as fast fashion. Glasgow does not pollute the wider water systems e.g. through antibiotics, nutrients in salmon feed, or microplastics.</p> <p>Material goods and clothing are reused and recycled, to reduce industrial burdens on global water supplies.</p> <p>Decontamination of vacant and derelict land sites, and tighter regulation and enforcement of environmental standards, reduces pollution in waterways.</p>	<p>Procurement practices are overhauled and supply chains coming into Glasgow do not involve dangerous or hazardous working conditions such as unsafe mining or child labour.</p> <p>Glasgow trains enough local citizens to fill essential health sector jobs, avoiding the tendency to recruit from other nations at levels that leave their local populations underserved. Food exported from Glasgow and its regions (such as fish) is free from harmful toxins e.g. heavy metals.</p> <p>The labels on products for sale in Glasgow are improved to offer trustworthy information about the conditions and wellbeing of workers in the supply chain.</p>	<p>Students worldwide are able to benefit from Glasgow's high-quality universities. Opportunities for global collaboration support gender and social equity (lower international fees, more ways to participate remotely) and sustainability (not dependent on high-carbon transport e.g. flying) Student exchange programmes are established and extended to build worldwide solidarity between students and share multidirectional learning.</p> <p>Goods in Glasgow's supply chains are not provided by child labour, which removes the opportunities for children worldwide to receive an education.</p>



3.3 GLOBAL-SOCIAL LENS (DETAILED)

	28 HOUSING	29 ENERGY	30 INCOME & WORK	31 SOCIAL EQUITY
GLASGOW'S DEFINITION OF THRIVING	Glasgow does not contribute to conditions that threaten the stability and security of places and materials for global communities.	Glasgow uses and produces energy in ways that contribute to global Net Zero ambitions, and is considerate in its direct and indirect use of energy to minimise global energy consumption.	Glasgow supports Fair Trade principles and good working conditions for all workers involved in its supply chains.	Glasgow takes responsibility as a Global North city to raise living standards worldwide, and reduce global inequalities.
WHAT THIS COULD LOOK LIKE	<p>Glasgow reduces its contribution to climate change via CO2 emissions, which is causing floods, crop failures and rising sea levels in particularly vulnerable global communities e.g. The Island Nations.</p> <p>Direct and indirect Greenhouse Gas emissions in the most intensive sectors such as transport, agriculture, and heating, are minimised.</p>	<p>Glasgow is developing methods of green energy generation and storage that can be exported and shared worldwide, to reduce other nations' dependence on extracting and burning fossil fuels.</p> <p>Glasgow's material footprint is minimised, to reduce embedded emissions, and is not supplied by goods or products that are made using fossil fuel energy.</p>	<p>Glasgow does not import goods that are produced using forced labour, child labour, or hazardous working conditions.</p> <p>Initiatives are in place to minimise the need for new goods such as textiles that are likely products of poor working conditions e.g. setting up school uniform or sports uniform banks.</p> <p>Trade-offs are acknowledged and managed between Glasgow's immediate need for certain goods (such as personal technology) and the poorly regulated countries and industries that supply them (including dangerous mining and factories).</p>	<p>Glasgow develops world-leading sustainable procurement practices and reduces its consumption of products from exploitative industries that erode social equity.</p> <p>Glasgow makes progress towards climate neutrality without increasing the burden on other countries e.g. through exporting waste.</p> <p>Glasgow does not fund or invest in practices or businesses that cause social or ecological harm e.g. through pension funds.</p> <p>Glaswegians are able to access better information and choice in relation to the social footprint of the goods and services consumed in the city.</p>



3.3 GLOBAL-SOCIAL LENS (DETAILED)

GLASGOW'S
DEFINITION
OF THRIVING

32 EQUALITY IN DIVERSITY

Glasgow is welcoming to all people from all cultures and delivers healthy cultural inclusion. Glasgow's activities do not support or uphold regimes with poor human rights records.

33 COMMUNITY/ NETWORKS

Glaswegians act as 'global citizens' to build community and solidarity worldwide.

34 POLITICAL VOICE

Glasgow sets a leading example of free, inclusive and intergenerationally just democratic engagement in political decisions.

35 PEACE AND JUSTICE

Glasgow ensures representation, inclusion, and protection of the rights of those most vulnerable to the effects of climate change.

WHAT THIS
COULD LOOK
LIKE

We challenge threats to equality, such as 'hostile environment' policies.

Cultural and educational exchange programmes build strong networks and connection between Glasgow residents and global populations.

Workshop discussions did not cover further detail.

Glasgow's climate and ecological footprints are minimised, lessening its contribution to global instability, forced migration, and conflicts.

Glasgow supports and welcomes climate refugees, and provides training and employment opportunities for newcomers to the city.

Clean local energy reduces Glasgow's dependence on imported fossil fuels e.g. gas. Short-term and long-term gains are carefully balanced e.g. Glaswegians who can afford to, are making certain sacrifices locally, to secure the long-term futures of people globally.

Transparency and comprehensive reporting is insisted upon, from corporations and SMEs, about the footprint of their products and services.

Glasgow supports the work of existing refugee organisations e.g. Refuweegee.



3.4 GLOBAL-ECOLOGICAL LENS (DETAILED)

	36 CLIMATE CHANGE	37 OCEAN ACIDIFICATION	38 CHEMICAL POLLUTION
GLASGOW'S DEFINITION OF THRIVING	Glasgow has no net contribution to global greenhouse gas emissions.	Glasgow contributes to protecting global oceans by having no net contribution to greenhouse gas emissions.	Glasgow is committed to minimising its material footprint. Glasgow has a Circular Economy that maximises re-use of resources, minimises its use of harmful chemicals across sectors and supply chains, and is a global leader in the remediation of polluted urban environments.
WHAT THIS COULD LOOK LIKE	<p>Sectors most responsible for global warming are decarbonised and Glasgow has minimised the emissions embedded in its supply chains. Glasgow is not fed by industrial farming methods, especially for livestock with high Greenhouse Gas emissions, such as cows.</p> <p>Consumption levels of the heaviest emitters are curtailed, and specific sites responsible for very high emissions are targeted e.g. Glasgow Airport.</p> <p>Glaswegians eat primarily plant-based diets that create fewer Greenhouse Gases. Buildings are retrofitted to Net Zero standards such as Passivhaus, to reduce our energy demand.</p>	<p>The sectors emitting most CO2 in Glasgow in 2022 - heating and transport - are fully decarbonised.</p> <p>Demand for CO2 burning activities is reduced overall, through investment in active and public transport, insulation and retrofit of buildings, and green local energy networks.</p> <p>Carbon Capture Storage is utilised on Vacant and Derelict Land sites.</p>	<p>Glasgow's overall consumption is reduced, and the dominant consumerist culture is challenged by re-using, recycling, and repairing initiatives. Consumption of raw materials is minimised. Procurement policies and practices outlaw single-use products, pollutants, and items designed for obsolescence.</p> <p>Urban design and waste management is improved to prevent pollutants from entering the biosphere e.g. Sustainable Urban Drainage Systems (SuDS) protect the water system from microplastics.</p> <p>Glasgow's procurement, construction, and waste management policies and procedures are transformed. Support is provided for alternative business models to keep materials and products circulating locally.</p>



3.4 GLOBAL-ECOLOGICAL LENS (DETAILED)

	39 EXCESSIVE FERTILISER USE	40 FRESHWATER WITHDRAWALS	41 LAND CONVERSION
GLASGOW'S DEFINITION OF THRIVING	Farming practices in Glasgow's global supply chains are effective in minimising reliance on excessive fertiliser use. Glasgow supports and requires sustainable land use throughout its supply chains.	Glasgow contributes to a sustainable and fair global water footprint.	Glasgow's supply chain is built upon transparent and sustainable land use practices, ensuring responsible and accountable land management. Glasgow maximises its global influence to support restorative land use practices.
WHAT THIS COULD LOOK LIKE	<p>Glasgow's surrounding farmlands utilise permaculture or regenerative agriculture methods. We support small-scale, local, food businesses (both growing and selling).</p> <p>Glasgow does not waste food. We use any food excess for compost to enrich local soil health. Subsidy or tax relief is provided to sustainable or regenerative food businesses. We can use previously vacant and derelict sites for growing food, cycling water and regenerating soil, in order to reduce dangerous nutrient loading elsewhere e.g. further upstream Glasgow's rivers.</p>	<p>The water footprint of Glasgow's production and consumption is minimised. People in Glasgow adopt circular economy principles in their water consumption patterns. Supply chains are fed by sustainable practices in the food and textile industries. People eat predominantly plant-based diets, that are less water intensive than the production of meat.</p> <p>People in Glasgow have access to transparent, easy to understand information about how sustainable our overall use of water is, and the water footprint of our products.</p> <p>Communication campaigns inform residents about Glasgow's water footprint, and the volume of water required for everyday items (clothes, food etc.)</p>	<p>Glasgow makes use of urban allotments, vertical farming, and city rooftops, to reduce the amount of land used for agriculture, and allow more natural biodiversity to flourish. Food produced by industrial agriculture methods that cause deforestation is not imported into the city.</p> <p>Policy interventions incentivise good practice, penalise damage to natural landscapes, and empower communities to be involved in sustainable land management.</p>



3.4 GLOBAL-ECOLOGICAL LENS (DETAILED)

	42 BIODIVERSITY LOSS	43 AIR POLLUTION	44 OZONE LAYER DEPLETION
GLASGOW'S DEFINITION OF THRIVING	Glasgow uses its political influence and convening power to facilitate awareness raising, evidence generation and debate around biodiversity solutions.	Glasgow supports and requires activity in the city and its supply chains to eliminate contributions to global air pollution.	Glasgow avoids using ozone-depleting chemicals and gases, and contributes to the development of alternatives through research and development.
WHAT THIS COULD LOOK LIKE	<p>Glasgow carefully disincentivises supply chains and consumption practices that have negative consequences for global biodiversity, whether that is through pesticide use, CO2 emissions or waste management.</p> <p>Agriculture and fishing are less intensive, maintaining sustainable level of fish populations e.g. wild salmon. More urban allotments are used for food growing, leaving untouched land intact. Glaswegians understand the importance of biodiversity for human and planetary health through education and communication initiatives.</p>	<p>Public and active transport is enabled throughout the city, with lots of connected walking and cycling routes. Highly polluting forms of transport (including air travel) are minimised. Policy and financial support is available for initiatives such as Liveable Neighbourhoods and Low Emission Zones, to disincentivise car use and promote active travel and more widespread use of public transport.</p> <p>Glasgow reduces its industrial emissions footprint by ending the production and consumption of single-use or short-life items (including products imported from around the world).</p>	<p>Raising awareness and education about the harms of ozone layer depletion, and which substances contribute to this.</p> <p>Support provided for suitable alternatives, and more ozone-friendly practices, such as more sustainable forms of transport in the city, strengthened by environmental regulation.</p>



4 USING THE DOUGHNUT TO APPLY SYSTEMS THINKING

In line with Glasgow and Scottish initiatives that aim to incorporate more systems thinking into their approaches, the Thriving Glasgow Portrait is designed to show the full picture of Glasgow.

Cities are complex systems, made up of many interconnected parts that influence and impact each other to create system effects. These system effects are experienced by the city's population, as well as in its natural environment, and in places and populations that stretch beyond the city's boundaries. It is important to understand how a system works, and how its distinct parts might be related, in order to design solutions to our ecological and social challenges that might truly be transformative.

The Portrait works to support higher level efforts to enact whole system change for holistic wellbeing, such as the Scottish Government's [National Performance Framework](#) (NPF). This framework sets out Scotland's aspirations and values across a spread of domains that support improved life chances, reduced inequalities, and better protection of the environment. Its whole system view is designed to consider those different domains simultaneously, and ensure that progress in one area is not made at the expense of improvements somewhere else.

Understanding these relationships, and links, between different policy areas and different outcomes in a particular place, allows changemakers to work in a way that embraces complexity.

Systems thinking approaches recognise that in order to make progress on the big goals of sustainability, equality, and wellbeing, many different departments, actors, and organisations have an important role to play. Glasgow's [Place Commission Report](#) positions the city's challenges around cross-cutting themes such as 'delivering social justice', 'building on Glasgow's spirit and distinctiveness', and 'responding to the climate emergency'. These priorities – unlikely to be within the remit of single departments – are designed to promote systems thinking and integration across the various disciplines and sectors that are part of Glasgow's 'place ecosystem'.

Glasgow City Council has been using joined-up and systems thinking in its policy work for some time, particularly to bridge some of the gaps between priorities that are predominantly focussed on either a social or an ecological goal. Their [CO-IMPACT tool](#), developed between Glasgow City Council and the University of A Coruña, provides users with suggested indicators to support them in tracking the additional social impacts, or co-benefits, of different nature-based solutions (NBS). Additionally, Glasgow's [Open Space Strategy](#) works to bring together and co-ordinate the various departments with responsibility for, or influence on, the different types of open space within the city (green, blue, and grey).

HOW DOES THE PORTRAIT USE SYSTEMS THINKING?

The Portrait combines social and ecological perspectives, showing equal consideration for human and more-than-human communities, and thinking about Glasgow in its wider national and global context. These are ambitious ways of increasing the depth and richness of our understanding of our interrelated challenges. By thinking of our challenges in this way, we might design smarter, further reaching solutions too.

Also important to our understanding of Glasgow as a large system, is to see it in its context – as part of, and dependent on, the social and ecological systems both within and outwith the city. The Portrait builds a holistic vision of Glasgow in terms of how it could thrive on its own terms, as well as how it could contribute to thriving outcomes for people and places elsewhere. The Portrait framework can therefore be used to guide decisions and actions that are designed to happen locally, but impact globally.



4.1 SYSTEMS THINKING FOR GLASGOW'S PRIORITIES

[GALLANT](#) is exploring sustainable solutions to five of Glasgow's key priorities, and here we show how the four lens perspectives can be applied to support holistic responses to big challenges.

The five GALLANT work packages are based around the following solutions:

- Addressing flood risk along the Clyde
- Halting and reversing biodiversity loss
- Regenerating vacant and derelict land through carbon sequestration
- Reducing car use and increasing active travel
- Increasing clean, community-scale energy sources

The unrolled Doughnut framework allows us to see where different parts of the picture might interact, or overlap, creating additional or knock-on effects (these could be positive or negative). Some of these interconnections for Glasgow were identified during the workshops and subsequent analysis.

By taking a four-lens view, it becomes clear to see where we might target action in one area to generate further improvements in another (co-benefits). Equally, we start to see where we must take care to avoid creating any unintended or unforeseen negative consequences in other lenses through our actions in one. We can use this process to explore what we want to make happen, as well as how we go about it, to pursue a vision of 'thriving' at home that still supports ecological and social wellbeing elsewhere.

This framework is a structured thinking tool that is suitable for analysing all kinds of policy areas, and plans for the city of Glasgow.

MORE LOCAL, GREEN ENERGY IN GLASGOW E.G., DISTRICT HEATING SYSTEMS

LOCAL ECOLOGICAL	GLOBAL ECOLOGICAL
<ul style="list-style-type: none"> • Using Glasgow's natural resources to harvest energy e.g., wind, solar, hydro. (+) • Better local air quality by reducing demand for indoor log burners. (+) 	<ul style="list-style-type: none"> • Reduced burning of fossil fuels, so lesser impact on climate change and ocean acidification. (+) • Raw materials required for new infrastructure and energy storage. (-)
<ul style="list-style-type: none"> • More affordable energy for Glaswegians. (+) • Sustainable pipeline from schools, to professional training in green energy, to good quality local jobs. (+) • Democratically/locally managed energy projects support social equity and community voice. (+) 	<ul style="list-style-type: none"> • Reduced dependence on (so less money sent to) authoritarian regimes with poor human rights records. (+) • Some of the materials and minerals needed for large scale energy transition are extracted by workers in very poor or hazardous conditions. (-)
LOCAL SOCIAL	GLOBAL SOCIAL



EXAMPLES

HALTING AND REVERSING BIODIVERSITY LOSS

LOCAL ECOLOGICAL	GLOBAL ECOLOGICAL
<ul style="list-style-type: none"> Increased coverage and variety of biodiversity in tree/plant species could protect against urban heat island effect, regulating temperatures and enhancing wellbeing (+) Improving habitat integrity may encourage water retention and prevent runoff (+) 	<ul style="list-style-type: none"> Habitat improvement could enable carbon storage solutions using biomass (+) Through restoration of degraded or contaminated sites for biodiversity, it may reduce levels of chemical pollution in soils, and their runoff into the water system (+) Restored lands may also decrease fertiliser runoff, which causes Nitrogen and Phosphorus loading, which leads to loss of biodiversity through eutrophication (+)
<ul style="list-style-type: none"> Use biodiversity corridors to design active travel routes and boost networks and connectivity around the city (+) 	<ul style="list-style-type: none"> Decontaminating water sources may reduce health risks to certain exported food sources e.g., fish (+)
LOCAL SOCIAL	GLOBAL SOCIAL

MORE ACTIVE TRAVEL IN THE CITY TO REPLACE CAR JOURNEYS

LOCAL ECOLOGICAL	GLOBAL ECOLOGICAL
<ul style="list-style-type: none"> Quieter, calmer streets with fewer vehicles enhance wellbeing for human and non-human communities (+) Less land is needed for cycling and walking routes than for cars (including car parking), leaving more space for nature and biodiversity corridors (+) Air quality is improved by reducing/removing vehicle emissions and pollutants (+) 	<ul style="list-style-type: none"> Reduced vehicle combustion of fossil fuels, reducing impact on climate change and ocean acidification. (+) Air pollution reduced worldwide (including pollution created by overseas car manufacturing) (+)
<ul style="list-style-type: none"> Better connected and accessible communities and neighbourhoods, not cut off by roads (+) Healthier local residents benefitting from increased physical activity (+) Using active means to get to school is better for children's learning (+) Some possible cost barriers (-) but with targeted support, could be more equitable overall (+) 	<ul style="list-style-type: none"> Reduced demand for raw materials (in cars) that rely on unethical extraction and production practices (+) Bike sharing or renting initiatives and circular practices may reduce streams of waste leaving Glasgow (+)
LOCAL SOCIAL	GLOBAL SOCIAL



EXAMPLES

CLIMATE ADAPTATION AND MINIMISING FLOOD RISK ALONG THE CLYDE

LOCAL ECOLOGICAL	GLOBAL ECOLOGICAL
<ul style="list-style-type: none"> Planting marsh and trees to reduce flood risk can also improve air quality (+) Adaptation infrastructure could include design elements to shelter or protect different species of biodiversity (+) 	<ul style="list-style-type: none"> Improved natural barriers along riverbanks to slow down water flow may also reduce fertiliser runoff, reducing Nitrogen and Phosphorus loading (+)
<ul style="list-style-type: none"> Avoiding flood damage can prevent disruption to transport and social networks (+) Some communities may be exposed to medium-term disruption or relocation if their neighbourhoods cannot be made flood proof (-) Prevention of mental distress and trauma experienced by flooding victims (+) 	<ul style="list-style-type: none"> Knowledge Exchange: Innovation and learning from Glasgow can be shared internationally with places that need it (+) Increased empathy for global populations impacted by flooding caused by climate change (+)
LOCAL SOCIAL	GLOBAL SOCIAL

REGENERATING VACANT AND DERELICT LAND (USING CARBON SEQUESTRATION)

LOCAL ECOLOGICAL	GLOBAL ECOLOGICAL
<ul style="list-style-type: none"> Soil quality will improve allowing for better nutrient cycling and providing alternative uses for the previously vacant sites e.g. for food growing (+) Some mature VDL sites host rare species of biodiversity, these may be at risk of disruption when sites are transformed (-) 	<ul style="list-style-type: none"> Increased carbon sequestration in VDL sites will reduce the amount of emissions released, which lead to climate change and ocean acidification (+) Lessons from innovation in Glasgow may be helpful for understanding/reversing chemical pollution and land conversion globally (+)
<ul style="list-style-type: none"> Glasgow's VDL sites are often in deprived communities, so transformation could be beneficial for social equity (+) Remediation of polluted sites will remove or minimize health risks e.g. from heavy metals in soil (+) 	<ul style="list-style-type: none"> New development on previously derelict sites may require importing a lot of materials via non-transparent supply chains (-) Possibility for international 'land swap' agreements that secure benefits for citizens elsewhere (+)
LOCAL SOCIAL	GLOBAL SOCIAL



TRANSFORMING LOCAL DIETS

LOCAL ECOLOGICAL	GLOBAL ECOLOGICAL
Food growing practices in and around Glasgow have significant impact on soil health , the water cycle , and levels of biodiversity . Agricultural land can also be used to store carbon and harvest energy .	Much of Glasgow's food is imported, meaning that our diets have a significant impact on the global planetary boundaries of climate change , land conversion , biodiversity loss , and excessive fertiliser use .
Glaswegians need equitable access to nutritious, tasty, affordable, sustainable food . A good diet supports children's education and good health . Sharing food is important for building community and connection with culture .	People all over the world are involved in growing, picking, and packing the food consumed in Glasgow. If working conditions in these supply chains are poor, this negatively impacts on worker health , children's ability to get an education , and threatens social equity .
LOCAL SOCIAL	GLOBAL SOCIAL

BENEFITS OF THE FOUR LENS PERSPECTIVE

Using this framework demonstrates that making a change in one area, for example by **transforming local diets**, could have wider impacts on the rest of the system (boosting health and wellbeing while reducing Glasgow's contributions to planetary and social harms). The topic of food systems was regularly raised in the workshops, and the example on this page shows how the four lenses might support a meaningful approach to food system transformation.

It can prove difficult to apply whole-systems solutions in practice, however, as urgent priorities, separate budgets, and competition for resources can constrain our abilities to think more broadly, or more long-term. The Portrait attempts to capture this huge diversity and multiplicity of thought, expertise, and priorities. Through the workshop process, contributions were made from a diverse range of disciplines, departments, sectors, and organisations, so that discussions could be informed by several perspectives on the system at once.

Exploring policy priorities using this holistic framework offers a **multisolving** approach to parallel issues for a city. '**Multisolving**' refers to a cross-sector way of responding to multiple problems with a single investment of time and money.

The framework helps us to remove false separation between priorities, resources, and areas of governance - things that are all too often siloed in cities.

The Portrait functions as a multi-outcome framework, and will be useful for changemakers to contextualise their work, to consider the wider reach their interventions may have, and encourage more whole-system thinking in policy planning, implementation, analysis, and evaluation.



4.2 SYNERGY BETWEEN THE DIMENSIONS

As well as using the four lenses to think about particular policy issues and strategic ambitions, the individual dimensions across the four lenses make most sense, in terms of the system, when we consider how they are often closely related to each other.

Some of the most effective future interventions may be those that are able to make progress on multiple wellbeing dimensions at the same time. During the workshops, we heard suggestions that incorporated multiple components of the Doughnut, that could improve both social and ecological metrics. Four possible examples (each with a starting point in a different lens) are provided here.

From **Local-Social**: action to improve **housing**.

Building more **affordable housing** could have benefits for other local-social dimensions, such as improved **incomes** if the housing is genuinely affordable, and stronger **community networks** if the housing is built in places it is most needed. However, there are concerns about the negative consequences of house building in both global and local ecological lenses, such as unsustainable **land conversion** and **biodiversity loss** if housing is built on land that is currently untouched and biodiverse. There is also a risk that construction emissions could lead to increased **air pollution** and **climate change**. New housing sites could lead to a loss of greenspace overall (with its **wellbeing** benefits) and also loss of good **soil health** that might be full of nutrients, ability to **cycle water**, and provide natural flood protection.

From **Local Ecological**: action to **harvest energy**.

We could make progress on this through ambitious and equitable energy-efficient retrofit (solar panels, heat pumps, insulation), which links to multiple local-social lens dimensions e.g. **energy, housing, health, income** and **social equity**. More **community** ownership of this energy infrastructure could improve solidarity and **social equity** worldwide (global-social) by reducing the reach, power and impacts of global oil and gas extraction companies, as well as regimes that threaten **peace and justice**. Decarbonising heat and transport sectors could also reduce **climate change** and **ocean acidification** in the global-ecological lens.

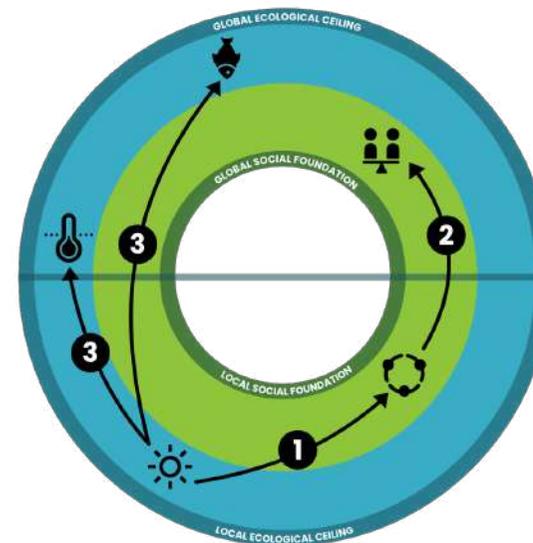


Diagram 4.2.1: A doughnut diagram tracing the impact of harvesting energy on other dimensions across all lenses.

- 1** Harvesting energy locally provides the opportunity for more community ownership of energy infrastructure.
- 2** Global knowledge exchange could improve social equity through rolling out community owned energy infrastructure in other similar communities in other countries.
- 3** Locally harvested renewable energy could also reduce the need for fossil fuels and therefore mitigate the emissions contributing to climate change and reduce ocean acidification around the world.



From **Global Ecological**: action to reduce **air pollution**.

Our goal is to reduce our contribution to the **air pollution** planetary boundary, which is also a dimension in the local-ecological lens. We could do this by investing in and promoting local-social **mobility** and better-connected **networks** via green public transport, reducing toxic emissions from private cars (which emit harmful NO2, CO, and particulate matter, and also fossil fuel combustion). These emissions are dangerous for **health** and **wellbeing** (local-social and local-ecological) and removing them in favour of public or active transport could also lead to reductions in **climate change** and **ocean acidification** that are caused by burning CO2.

From **Global-Social**: action to **end hunger** (SDG2, Doughnut Dimension 'food').

More urban farming could contribute to this goal – if we produce more **food** locally (linking to local-social and local-ecological lenses, for example through improving **soil health** and nutrient richness by more composting in the city), it might reduce the amount of food imported from elsewhere. This would reduce our reliance on those supply chains that we can't be confident are using ethical or sustainable practices, and which threaten **health** and **social equity** worldwide. Urban farming and allotments could also contribute to local-social wellbeing by increasing connectedness and solidarity amongst **community** members.

How to apply this framing?

To use the four-lens framework for assessing specific actions, plans, or strategies, DEAL have published several useful [tools](#), including one for '[Exploring a Topic](#)', which can be adapted for organisational or workshop purposes. Exploring ideas or plans in this way can reveal the potential your project might have in bringing Glasgow closer to the thriving vision.

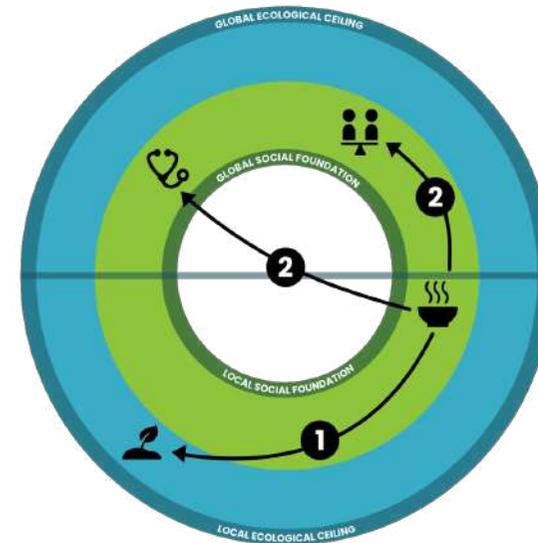


Diagram 4.2.2: A doughnut diagram tracing the impact of food on other dimensions within the local-ecological ceiling lens and global-social foundation lens.

- 1** To facilitate urban farming, there is an increase in composting within the city, which improves soil health.
- 2** Relying on local food production reduces need for global supply chains which can have adverse impacts on health and social equity around the world.



5 WHAT HAPPENS NEXT

5.1 GLASGOW JOINS THE DOUGHNUT MOVEMENT

Glasgow is now part of a network of trailblazing places, joining a growing list of progressive cities and towns that are experimenting with how to apply and embody the principles of Doughnut Economics in the way they govern, live, and work in their places. Joining the DEAL peer-to-peer community has provided the Glasgow Portrait with insight and inspiration.

For example:

CORNWALL (England): Developed a Doughnut-shaped decision-making wheel to inform all areas of Council policymaking

BRUSSELS (Belgium): Using the Portrait as a starting point to develop more refined indicators. Incorporating the Doughnut principles of their Portrait to inform the new Brussels-Capital Region economic transition strategy, 'Shifting Economy'. Sharing their Doughnut via webinars to interested businesses and organisations in the city

BASEL (Switzerland): Running workshops for businesses through their Impact Hub to support the ambitions of the private sector using DEAL's [Design for Business](#) tool

AMSTERDAM (Netherlands) & TØNSBERG (Norway): Hosting annual Doughnut festivals to bring together changemakers and celebrate good practice

MEXICO CITY (Mexico): Using the Doughnut to steer discussion and resident engagement on their 20 Year Plan, seeking long-term sustainable wellbeing.

NANAIMO (Canada): Adopting the Doughnut as a cohesive vision for all city strategies and planning processes

For many more examples, see the [stories](#) on DEAL's website.



Image 4.2.1: Glasgow joins members of the peer-to-peer network in Grenoble, June 2023.





5.2 APPLYING THE DOUGHNUT IN PLACE

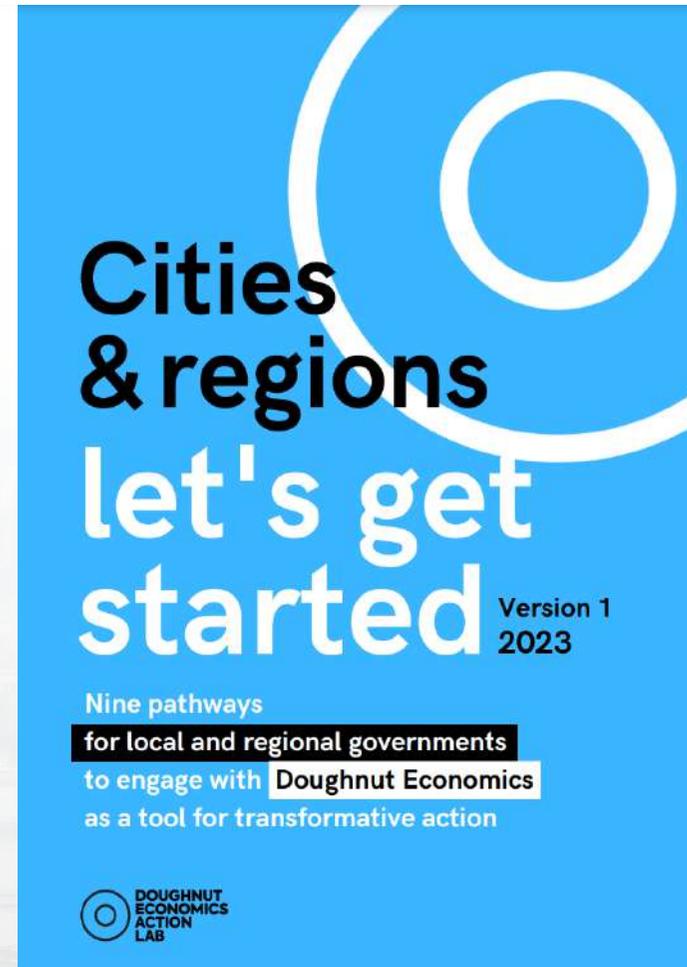
Some of the work from Glasgow and other places has been compiled into a guide and report from Doughnut Economics Action Lab (DEAL) [‘Cities and Regions: Let’s Get Started’](#)

As a network, these places can learn from each other, share experiences, and try to adapt approaches from elsewhere to our own local contexts. There are several pathways outlined for applying the Doughnut in place, and these range from small scale, very local actions that might be useful for individuals or small teams, to really ambitious transformational pathways, which seek to overhaul a whole city or regional system.

Different places can play to their own unique strengths, and respond to their own unique contexts. For most places, making progress towards the Doughnut will involve amplifying and reinforcing the work and activities that are already well aligned with the Doughnut’s principles, and scaling back or putting an end to the practices in a place that are degenerative or divisive.

Cities with supportive policy regimes, like Glasgow, may have the opportunity to embed these principles at their highest levels of governance in order to advance their journey to thriving. Other places might start with community action, or just a small group of public servants or businesses who wish to embed these ideas more fully in their own spheres. At any scale, people and organisations from across the whole of the city system can contribute to the overall goal: getting into the Doughnut.

Short, medium, and long-term action can all contribute to the Doughnut-shaped shift. Whether testing the framework on ongoing projects, bringing the Doughnut framework into plans and strategies, or using it for high-impact decision making, there is a need for changemakers at all levels in a city to implement their day-to-day work with the Doughnut principles in mind. DEAL have outlined 8 key principles for putting the Doughnut into practice.





DEAL's 8 principles for putting the Doughnut into practice:



Embrace the 21st Century Goal

Aim to meet the needs of all people within the means of the planet. Seek to align your organisation's purpose, networks, governance, owner-ship and finance with this goal.



See the big picture

Recognise the potential roles of the household, the commons, the market and the state – and their many synergies – in transforming economies. Ensure that finance serves the work rather than drives it.



Nurture human nature

Promote diversity, participation, collaboration and reciprocity. Strengthen community networks and work with a spirit of high trust. Care for the wellbeing of the team.



Think in systems

Experiment, learn, adapt, evolve and aim for continuous improvement. Be alert to dynamic effects, feedback loops and tipping points.



Be distributive

Work in the spirit of open design and share the value created with all who co-created it. Be aware of power and seek to redistribute it to improve equity amongst stakeholders.



Be regenerative

Aim to work with and within the cycles of the living world. Be a sharer, repairer, regenerator, steward. Reduce travel, minimize flights, be climate and energy smart.



Aim to thrive rather than grow

Don't let growth become a goal in itself. Know when to let the work spread out via others rather than scale up in size.



Be strategic in practice

Go where the energy is – but always ask whose voice is left out. Balance openness with integrity, so that the work spreads without capture. Share back learning and innovation to unleash the power of peer-to-peer inspiration.



5.3 WHAT HAPPENS NEXT IN GLASGOW?

The Thriving Glasgow Portrait is a vision of a future Glasgow as a Thriving City. It provides us with a shared understanding of our city's strengths and challenges, as well as a shared set of goals for Glasgow to work towards. No matter which community we live in, or which sector we work in, we can use the Thriving Glasgow Portrait to guide our activities, and make sure our actions are aligned with that shared vision.

Ways we might use the Portrait in Glasgow:

- Sparking internal learning, visioning and new conversations within our organisation,
- Assessing or evaluating projects in regard to the four lens framework,
- Empowering and inspiring strategic partners and other changemakers (across government, private and third sectors and community leaders),
- Policy prioritisation and impact assessment,
- Informing or deciding the metrics and indicators we use to track progress,
- Identifying key enablers or levers of change,
- Support strategic goal-setting or high-level political commitment,
- Embedding Doughnut principles into decision-making or policy-making processes e.g., City Procurement.

The Portrait framework can help shape how we enact some of our big priorities. Glasgow's Greenprint for Investment shows how many opportunities exist for maximising the potential of the city's spending decisions. With maximising co-benefits across all targets in mind, large-scale projects such as green housing retrofit, Clyde Metro, or a district heating network, could be implemented in ways that improve wellbeing, ecological and equity outcomes, for the people of Glasgow and our fellow global citizens.

The Thriving approach of thinking in four lenses can support Glasgow in the next stages of its development. By giving structure to complex, interconnected policy areas, this approach can shape and inform Glasgow's long-term, transformational ambitions of achieving a Just Transition and shifting to a Wellbeing Economy.

THRIVING CITIES INITIATIVE

Becoming a thriving city requires coordinated action across a broad range of communities and sectors to address the barriers that prevent people from thriving, while minimising harm to the many ecosystems that we rely on to meet our everyday needs. Building on the City Portrait, TCI will convene changemakers across the city to identify and implement tangible actions to address inequities in consumption patterns.

This process will serve to co-create the conditions for regenerative and redistributive systems that support wellbeing within planetary limits to flourish across Glasgow. We encourage residents, businesses, community organisations, institutions and policy makers to join us in this journey. How can you help Glasgow become a thriving city?

If you would like more information please visit [Thriving Cities Initiative](#) website. To get involved in this process, please contact the Sustainability Team at Glasgow City Council [here](#).

GALLANT

The partnership between Glasgow City Council and the University of Glasgow continues through the interdisciplinary GALLANT research programme (2022-2027). GALLANT will use the insights from this Portrait to work on increasing our understanding of how the different parts of our city system work together.



5.4 A MESSAGE FROM THE GALLANT LEADERSHIP TEAM

A REFLECTION

Working with stakeholders from across the city has been a highlight of the last 18-months. Launching the Thriving Glasgow Portrait demonstrates how GALLANT's City-University partnership can create shared, ambitious climate and social justice goals and deliver an action plan for a just and sustainable transition at the city scale.

The Thriving Glasgow Portrait builds the foundation for our whole-system approach that values stakeholder perspectives and insights in driving rapid and meaningful progress. GALLANT's living lab approach invites further collaborations with stakeholders, including communities, in our next phases of work. We are continually sharing lessons and experiences with C40 Cities and the Doughnut Economics Action Lab networks of global places connecting us with other academics, policy leaders, and cities across the world to share experience and learning.

MAKING CONNECTIONS

As Glasgow progresses towards its goals, evidence needs to be central in decision-making and planning. The Thriving Glasgow Portrait makes this easier by using GALLANT's interdisciplinary expertise to ensure that evidence drives systemic transformation where innovation and economic development are responsibly considered through ecological and social lenses.

Making connections among relevant actors in the complex city system helps us align emerging thinking with evidence to support systems leadership. Shared understanding of how the city system is changing, the key influences in the current system and what the desired future could look like inform sustainable development.

DOING IT DIFFERENTLY

"If you always do what you've always done, you'll always get what you've always got."

- Henry Ford

GALLANT and our partners recognise that - a climate-resilient, thriving Glasgow, is a city where sustainability and social justice must go hand-in-hand to deliver a low carbon and climate resilient future. To achieve that future, we must do things differently.

Successful transformation will require well-aligned actions, where each action is designed to contribute to the overarching goal of thriving and opens new opportunities for progress. The Thriving Glasgow Portrait will help align our actions. It has built the foundations for a shared understanding, vision, trust and commitment for ongoing innovation and collaboration.

The launch serves as Call to Action to those with aligned visions to help drive progress and maintain momentum for systemic change. It helps identify specific contributions that can be made, across a large number of targets highlighted for action. Your participation will help GALLANT generate evidence on key leverage points for change and move sustainable action beyond the paralysis of complexity.

As we move forward we are looking to collaborate additionally across sectors and disciplinary siloes, creating opportunities for new dialogue, consensus building, and formation of broad coalitions for action. Please get in touch and share your thoughts.



GALLANT – WHAT'S TO COME?

Our people- and place-based approach will generate environmental solutions that deliver co-benefits for the environment and people. We will push the frontiers of understanding using UK-leading environmental science to prepare for future climate challenges. We will ambitiously make use of the unique opportunity afforded by Glasgow as a living lab to test a new cross-disciplinary, cross-sector systems approach. GALLANT's research will reduce environmental degradation and support human health, placing a healthy environment in a single system with economy, society and culture.



Professor Jaime L. Toney

Director of the Centre for Sustainable Solutions
Professor of Environmental and Climate Sciences



Professor Petra S. Meier

Programme Director Systems Science for Public Health
Professor of Public Health



Professor E. Marian Scott

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Thriving Glasgow Portrait: www.gla.ac.uk/research/az/sustainablesolutions/ourprojects/gallant/city-portrait

GALLANT: www.gla.ac.uk/research/az/sustainablesolutions/ourprojects/gallant

Thriving Cities Initiative: www.c40.org/what-we-do/raising-climate-ambition/inclusive-thriving-cities/thriving-cities

Glasgow City Council: www.glasgow.gov.uk/index.aspx?articleid=27695

DEAL: doughnuteconomics.org

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Report design created by: [Petra Baiba Olehno](#) and [Cameron Mackay](#)



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8 APPENDICES



APPENDIX 1: Local-Social Lens worksheet as used in the stakeholder workshops (April, 2022).

		Example Target	Snapshot Indicator			Example Target	Snapshot Indicator
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Are the People of Glasgow Thriving?</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Local-Social Lens</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">DEAL COMMUNITY CREATED</p>	<p>Food</p>	Achieve a Silver 'Sustainable Food Place' award	75% of Glasgow residents do not get 5 portions of fruit & vegetables per day	<p>Connectivity</p>	Everybody in Glasgow who needs it has supported access to digital technology and skills development opportunities	65% of households in the social rented sector have a broadband connection in their home	
	<p>Water</p>	Official target unidentified. UK Chief Medical Officers support calls to add fluoride to drinking water (all 4 nations)	0% of Scotland's drinking water supply has fluoride added to it	<p>Community</p>	Volunteering is recognised as having value in itself and people living in poverty can access volunteering opportunities	Levels of volunteering are lower in Glasgow (22%) than the Scottish average (26%) or comparable cities (Edinburgh 29%), with additional inequality along deprivation lines	
	<p>Health</p>	Narrow the gap in Healthy Life Expectancy (HLE) within Greater Glasgow and Clyde and between Greater Glasgow and Clyde and the rest of Scotland for both men and women by 2028	HLE in Glasgow is 56 years for men and 57.4 years for women, compared to the Scottish average of 60.9 years (males) and 61.8 years (females). Within Glasgow City Region: HLE is highest in East Renfrewshire (68.7 years for men) and lowest in Inverclyde (54.4 years). This represents a gap in healthy life expectancy of approximately 14 years	<p>Culture</p>	Ensure everyone has the opportunity to create, experience and participate in cultural activity	89% of Glaswegians participate in at least on cultural activity per year, but only 71% within the most deprived quintile, and only 46% of Glaswegians with no qualifications	
	<p>Education</p>	95% of school leavers to go into jobs, training, further or higher education	80.7% of school leavers recorded as in jobs, training, further or higher education	<p>Income & work</p>	Reduce the amount of money that leaves the city through high interest or 'payday' loans, pawnbrokers etc.	32% of Glasgow households have no savings	
	<p>Housing</p>	7500 (minimum) new affordable homes to be built by 2024 (Glasgow) New Build Heat Standard under development: all new homes to be zero-emissions from 2024 (Scotland)	5000 households/7632 people assessed as homeless or threatened with homelessness	<p>Social equity</p>	Health and social care services contribute to reducing health inequalities	17% of Greater Glasgow and Clyde residents provide regular (unpaid) help or care for a sick, disabled or frail person	
	<p>Energy</p>	All homes to meet energy efficiency rating of 'C' or above by 2032 (Glasgow)	25% of Glasgow's households are classed as fuel poor, and 11.4% are extremely fuel poor	<p>Equality in diversity</p>	An increased proportion of women, black and minority ethnic people, younger people, disabled people and LGBTI+ are supported to enter employment or training	Employment rates for working age people are lower for ethnic minorities (47.8%) and disabled people (45.2%) than in Glasgow generally (67.3%) and all of these figures are lower than the (Scottish) national figures	
	<p>Mobility</p>	Glasgow will achieve a 'sustainable travel hierarchy' with first priority given to active travel, second to public transport, and lastly to private means	79% of adults in Glasgow are satisfied with public transport. 2009 – 2021: 165% increase in cycle trips in and out of Glasgow city centre	<p>Political voice</p>	The City Charter will give Glasgow's citizens the right to be meaningfully involved in planning and designing the services they use	17% of Glasgow residents agree with the statement: 'I can influence decisions affecting my local area'	
				<p>Peace & justice</p>	<i>Target unidentified</i>	75% of Glasgow adults report feeling safe walking through their neighbourhoods at night	

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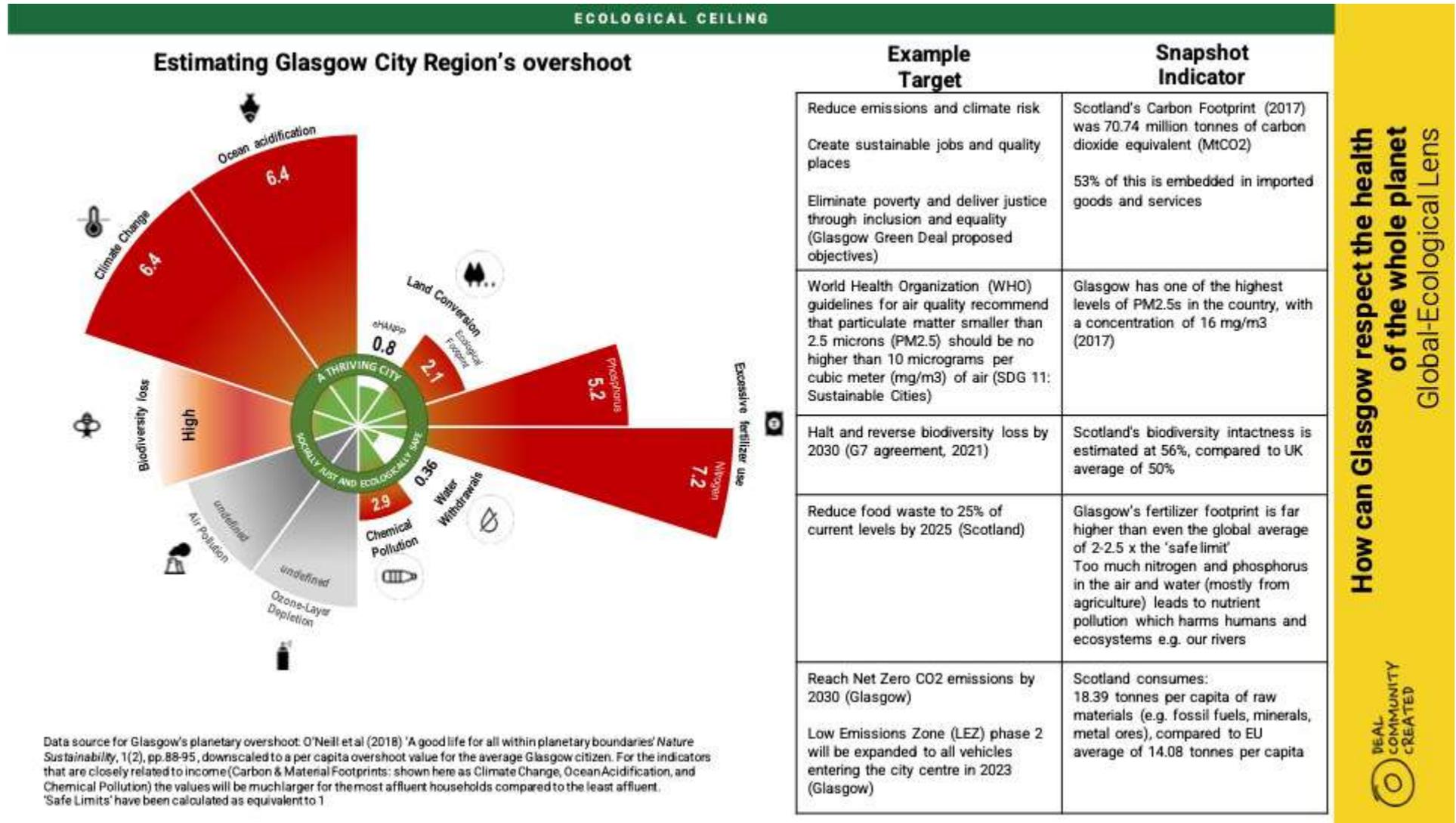


APPENDIX 2: Local-Ecological Lens worksheet as used in the stakeholder workshops (April, 2022).

ECOLOGICAL CEILING		
	How nature does it/Example targets	Glasgow snapshot
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">How can Glasgow be as generous as the wildland next door?</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Local-Ecological Lens</p> <div style="display: flex; align-items: center; justify-content: center; margin-top: 20px;"> <p style="font-size: 8px; margin: 0;">DEAL COMMUNITY CREATED</p> </div>	<p>Cleanse the air</p> <p>Glasgow Green, established in the 15th century is sometimes referred to as the 'lungs of the city'. Plants function as a filter of volatile pollutants including organic carbon and particulates. Target: 20% reduction in car vehicle kilometres by 2030 Air Quality Strategy (Scotland): PM₁₀ (particulate matter) concentrations should not exceed 18µg/m³ NO₂ (nitrogen dioxide) concentrations should not exceed 40µg/m³</p>	<p>Transport accounts for 36% of Scotland's greenhouse gas emissions. PM₁₀: No breaches in 2020 due to reduced traffic from Covid lockdown, pre-lockdown breaches at Abercrombie Street site (2019) NO₂: Glasgow Kerbside (Hope St.) site consistently exceeds target concentrations (1998-2020), including during lockdown</p>
	<p>House biodiversity</p> <p>Wildflower meadows, native hedgerows, long grass, and other plants provide habitat for pollinators and wildlife. Target: Glasgow's Green Urban Connectors project will foster over 50 open spaces between Darnley, Priesthill, Pollok and Crookston to provide local environments where pollinating insects, birds and small mammals can all thrive</p>	<p>97% or 3 million hectares of flower-rich grassland have been lost in the UK since WW2. Cutting grass short in parks reduces habitats for a range of insect, bird and small mammal species. Glasgow Green, Hogganfield Park, Linn Park, Trinley Brae and Cranhill have cutting and planting regimes to encourage wildflower meadows (2019).</p>
	<p>Store carbon</p> <p>Intact peatlands can store > 20-times the carbon of forests, in the water-saturated sub-surface. Target: 85 locations to target for peatland restoration identified across the Glasgow City Region, 52 of these in South Lanarkshire. Additional benefits are improved habitats for wildlife and natural flood management to deal with increased rainfall</p>	<p>Scotland's peat soils cover over 20% of the country, but more than 80% of these are degraded. Glasgow City Region has around 56,000 hectares of peatland, largely in upland areas that surround the Glasgow. The condition of the City Region's peatlands is not captured in GIS tools but is reported to be far from thriving.</p>
	<p>Cycle water</p> <p>The sub-basins of the Clyde support the surrounding human communities, wildlife and broader ecosystems. The drainage basins stabilise the shorelines and protect inland communities and habitats from damage. Target: The River Basin Management Plan has set a target to improve the remainder to 'good' status by 2027</p>	<p>60.5% of the Clyde basin's freshwaters are classified as 'less than good' 35% classed as 'good' 4.4% classed as 'high'</p>
	<p>Harvest energy</p> <p>Energy is generated naturally through Scotland's winds, tides, waves, rain, and daylight hours Target: Plans to expand the district heating system at Queens Quay (which extracts heat from the river water to generate energy) and create new schemes at Polmadie and Gorbals to grow the network</p>	<p>13.5% of Scotland's CO₂ emissions have been displaced by renewable energy sources (2019) Renewable electricity generation (2020) equivalent to approximately 97% of Scotland's gross electricity consumption Renewable heat generation (2020) meets 6.4% of Scotland's non-electrical heat demand, missing the target of 11% by 2020</p>
	<p>Regulate the temperature</p> <p>The ancient Caledonian Forest once extended across all of Scotland (before human settlers) Target: Glasgow Climate Forest: 18 million trees to be planted in urban and rural parts of Glasgow City Region during next decade, 1.5 million of these trees to be planted in urban areas with local communities, and 101 native woodlands to be planted in locations that support migratory routes for wildlife</p>	<p>Estimated current tree canopy cover in urban Glasgow is 16.6% Average: 112 trees per hectare (above UK average tree density)</p>
	<p>Build & protect soil</p> <p>Natural landscape provides long-term storage of pollutants through microbially processes that form minerals and in sedimentation in deep, low-energy waters. Target: 2020/21 delivery plan aims to bring 61 hectares of vacant and derelict land back to productive through remediation/decontamination of former brownfield and industrial sites.</p>	<p>939 hectares of vacant and derelict land (2020), a 1.6% reduction on 2019 1734 vacant and derelict sites across the region, with a larger proportion located in deprived areas Soil Sealing for Clyde region: just over 5% (2019), rising since 2009</p>
	<p>Enhance wellbeing</p> <p>The name 'Glasgow' derives from its Gaelic 'Glaschu', meaning 'Dear Green Place' and the city's parks and green spaces contribute to the daily lives of the people who live, work and visit. They contribute to objectives for climate change mitigation, improving public health, reducing inequalities and bringing communities together. Target: Provide good quality open green space within 400m of every home.</p>	<p>Glasgow has more than 90 public parks and gardens, more than in Aberdeen or Dundee (5% and 6% respectively). 80% of Glasgow's children live within 400m of accessible green space, but in some neighbourhoods this is as low as 46% (rising to 97% in the most affluent parts of the city)</p>



APPENDIX 3: Global-Ecological Lens worksheet as used in the stakeholder workshops (April, 2022).





APPENDIX 4: Global-Social Lens worksheet as used in the stakeholder workshops (April, 2022).



Sustainable Development Goals

Snapshot Indicators

SDG 2: Zero Hunger SDG 15: Life on Land	Agricultural land appropriation Approximately 1.1 million hectares of land are needed globally (grazing livestock and growing crops) to support the food consumption of Glasgow City Region. This land includes regions which experience high levels of hunger (e.g. sub-Saharan Africa) and high levels of deforestation (e.g. South America)
SDG 7: Affordable and Clean Energy	Scotland is a net exporter of materials. Domestic Extraction of materials is 22.8 tonnes per capita (2017) compared to an EU average of 11.3 tonnes. This is mostly attributed (58%) to the extraction and export of fossil fuels
SDG 3: Good Health and Wellbeing SDG 8: Decent Work	Occupational Safety Estimate: Consumption within Glasgow City Region is associated with approximately: 53 Occupational Fatalities 28,891 Occupational Injuries globally
SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 15: Life on Land	Raw material extraction The per capita material footprint (biomass, metal ores, construction raw materials, fossil fuels) of Scotland is approximately 18.4 metric tonnes (m/t) per year (the sustainable limit is generally agreed to be approximately 8 m/t per capita). Scotland does not extract any domestic metal. All the metal we need (and its environmental burdens) must be mined abroad. One tonne of iron requires twenty five tonnes of raw materials
SDG 12: Responsible Consumption and Production	A single iPad involves materials from 748 international suppliers
SDG 8: Decent Work SDG 12: Responsible Consumption and Production SDG 14: Life Below Water SDG 15: Life on Land	Forced Labour Estimate: Glasgow City Region imports annually £326 million worth of goods 'at risk' of being produced by forced labour Top 5 imported products into the UK at risk of modern slavery: <ul style="list-style-type: none"> • Garments/textiles • Electronics • Fish • Cocoa • Rice
SDG 12: Responsible Consumption and Production SDG 3: Good Health and Wellbeing	Only 27% of the UK's material footprint is accounted for by domestic resource use Extractions in China account for 15% of the UK's material footprint, and India accounts for 9%
SDG 4: Quality Education SDG 8: Decent Work SDG 16: Peace & Justice	Child Labour Estimate: 44,305 child labourers working worldwide in the supply chains that serve Glasgow City Region

How can Glasgow respect the wellbeing of all people?
Global-Social Lens



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Natural Environment Research Council



University of Glasgow

THRIVING GLASGOW PORTRAIT

A SHARED VISION FOR A HEALTHY,
EQUITABLE AND SUSTAINABLE FUTURE

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SHORTFALL