A GUIDE TO THE
CARBON & CO-BENEFITS
DECISION SUPPORT TOOL

January 2023
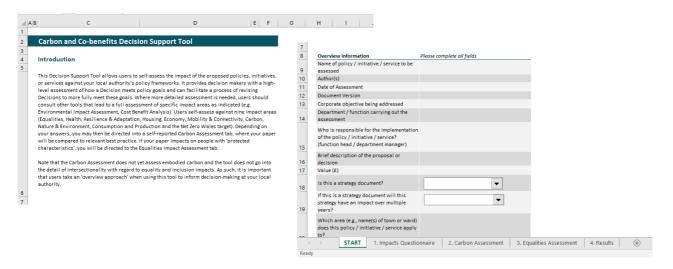
Centre for **Climate Change**
and **Social Transformations**

Tyndall°Centre
for Climate Change Research

Contents

1. What does the tool do?

The **Carbon and Co-Benefits Decision Support Tool** (referred to as the "Tool" onwards) has been developed through a collaborative project between the Centre for Climate Change and Social Transformation (CAST), Tyndall Centre for Climate Change Research at the University of Manchester, and Greater Manchester Combined Authority. Its aim is to support a holistic approach to decision-making through a process that embeds review and assessment of all policies, initiatives, or services against two key areas: carbon and equality and inclusion.

The tool enables officers to self-assess the impact of their proposed policies, initiatives, or services against a range of impact areas (Equalities, Health, Resilience and Adaptation, Housing, Economy, Mobility and Connectivity, Carbon, Nature and Environment, Consumption and Production, and their local authority's Carbon Neutral target) through completion of the **Impacts Questionnaire**. Depending on the answers given, users may then be directed into a more detailed self-reported **Carbon Assessment** where the proposal will be compared to relevant best practice for reducing emissions in buildings, transport, and land use and then given a rating. If the proposal impacts on people with protected characteristics, the users will be directed to a more detailed set of questions in the **Equalities Assessment**.

All officers putting forward a paper for a decision at a cabinet or scrutiny meeting are encouraged to use the Tool, ideally from project initiation, and submit the results of the assessment to their Governance Team.

Outputs from the Tool are provided to decision makers to help them understand the full impact of proposals across carbon and equalities, and to ensure that these have been shaped to gain maximum possible co-benefits, or seek changes or mitigation measures where needed.

2. Will the tool calculate the carbon footprint of a proposal?

This tool is NOT a Carbon Emissions Calculator.

There are some self assessment questions about carbon and environmental performance, and depending on the answers given in various parts of the Impacts Questionnaire, the user may be directed to the simple Carbon Assessment tab where the proposal will be compared with best practice to generate a rating. This will indicate where performance could be improved. The simple Carbon Assessment allows comparison with best practice for new buildings, renovation of buildings, transport, procurement of vehicles, and land use.

The carbon assessment does not offer a quantification of carbon emissions or a full assessment of life cycle and consumption based emissions. More specialist assessment tools such as Cost Benefits Analysis Environmental Impact Assessment and life cycle assessment of carbon impacts may thus be required in addition to completing this Tool.

3. How do you access the tool?

Users can access the Tool from your local authority's intranet page or internal shared folder. You can check this with your Co-benefits Assessment or the Environment Team.

Always make sure that you have the latest version of the Tool.

4. When is it best to engage with the tool?

We advise using it as early as possible – from project initiation or in the development of a strategy, project, or proposal to make sure that proposals align with your local authority's strategic priorities.

You may also want to have an initial conversation with the lead for the Co-benefits Assessment or the Environment Team.

5. Do you have to fill in the Tool for every paper you submit?

Yes. You are expected to submit the Tool for every paper you are submitting for a decision at a cabinet or scrutiny meeting.

For strategies
For some papers such as new strategies, you may not feel able to answer all of the questions with confidence as this will depend on the approach to delivery. In this case, you should answer on the basis of what the strategy/proposal aims to achieve. This is an important opportunity to note any potential issues at the delivery stage which could undermine the aims set out in the strategy and any mitigation measures needed to ensure delivery is in line with the original aspirations. These should be noted in the Recommendations Box on the results page and the recommendations section of the paper itself.

For projects
Some papers may include a number of projects where the answers between projects will vary. In this case we ask you to take a high level ('helicopter') view, assessing across the content of the paper. However, again, where there are particular areas that will have negative impacts or risks that the assessed level of positive impact will not be met, these should be flagged in comment boxes and in the Recommendation Box.

For updates
It is a good practice to run the Tool whenever there is an amendment to an earlier submission or an update to a paper that needs a decision in order to re-assess whether the updates or changes to a strategy, project, or proposal continue to align with your local authority's carbon and equalities priorities and maximise potential co-benefits.

6. Guidance for completing the Tool

Please watch the training videos for the Tool available here: link to video.

If you have any further questions regarding the Tool, you can also contact your local authority's Co-benefits Assessment or Environment Team.
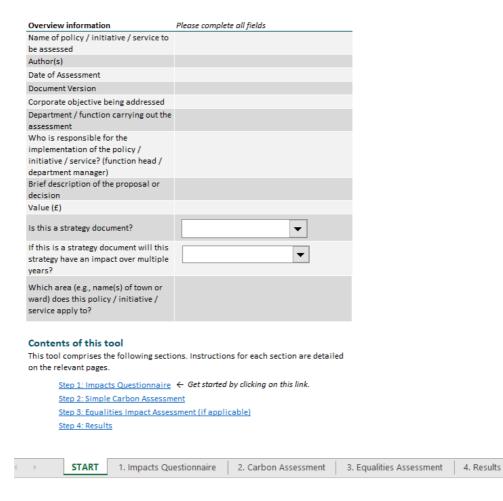
7. How long will it take to complete the Tool?

It should take around **an hour to complete the Tool process**, but it may be that some of the questions lead to you wanting to do more analysis or reviewing your proposal. As mentioned above, you should ideally run through the Tool at the project initiation stage to ensure that your proposal contributes to your local authority's social, environmental, and economic priorities.

8. Key elements of the Tool

The Tool has **five parts**: a Start page, an Impacts Questionnaire, a simple Carbon Assessment, an Equalities Assessment, and a Results page.

a. Start – this is where users should log contextual data for the policy, initiative, or service that requires a decision

Overview information	Please complete all fields
Name of policy / initiative / service to be assessed	
Author(s)	
Date of Assessment	
Document Version	
Corporate objective being addressed	
Department / function carrying out the assessment	
Who is responsible for the implementation of the policy / initiative / service? (function head / department manager)	
Brief description of the proposal or decision	
Value (£)	
Is this a strategy document?	▼
If this is a strategy document will this strategy have an impact over multiple years?	▼
Which area (e.g., name(s) of town or ward) does this policy / initiative / service apply to?	

Contents of this tool

This tool comprises the following sections. Instructions for each section are detailed on the relevant pages.

Step 1: Impacts Questionnaire ← *Get started by clicking on this link.*
Step 2: Simple Carbon Assessment
Step 3: Equalities Impact Assessment (if applicable)
Step 4: Results

| ◄ | ► | **START** | 1. Impacts Questionnaire | 2. Carbon Assessment | 3. Equalities Assessment | 4. Results |

b. Impacts Questionnaire – this section is for high level assessment of all impact categories
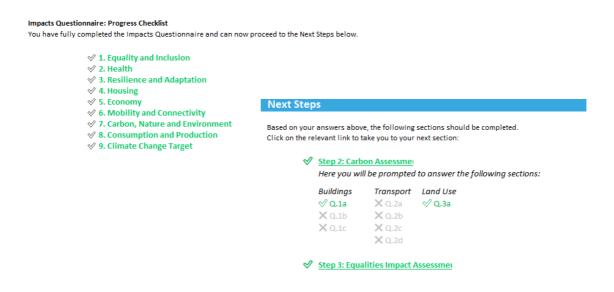
The **Impacts Questionnaire should be completed for all papers** and contains questions under the nine Impact Areas:

1 Equality and Inclusion
2 Health
3 Resilience and Adaptation
4 Housing
5 Economy
6 Mobility and Connectivity
7 Carbon, Nature and Environment
8 Consumption and Production
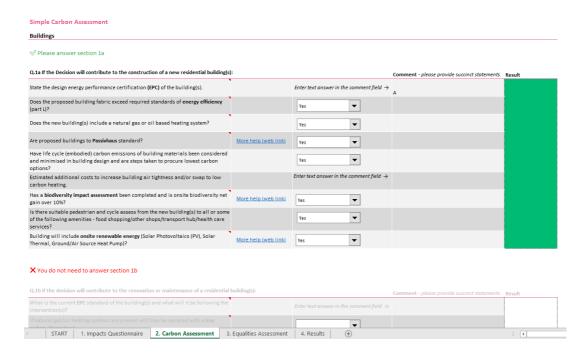9 Climate Change Target

Each Impact Area has a headline question which is defaulted to "Yes" so as to prompt users to take a look at all the sub-questions to consider the possible impacts of their proposal in broad terms.

Whether a simple Carbon Assessment or Equalities Assessment is needed depends on your answers to questions within the Impacts Questionnaire. A guide to which other parts of the assessment should be completed is shown at the bottom of the Impact Questionnaire tab and these assessments which are located on the subsequent tabs of the Excel workbook.

c. Carbon Assessment – this part allows users to do a simple carbon assessment

The Carbon Assessment has three sets of questions under Buildings, four sets under Transport, and one under Land Use.

d. Equalities Assessment – this is a form that users need to complete, if required

The Equalities Assessment pro-forma has three sections. **Section 1** asks for information about the policy, initiative or service that needs to be assessed. Some information here have been automatically pulled from your answers in the Start page. **Section 2** is where you should specify the impacts across relevant protected characteristics. In **Section 3**, remember to identify yourself as the author of the proposal as well as whoever you have consulted to complete the Equalities Assessment.

e. Results – this page presents the results of the Impacts Questionnaire and Carbon Assessment

The Results page indicates a RAG rating for each relevant Impact area with a comments box for each that you should complete, the Recommendation Box and the details to export the outputs for inclusion in papers.

9. Providing comments and a recommendation on the Results page

For each response in the Impacts Questionnaire there is the opportunity to provide a brief comment to explain and contextualise the answer given. Please be succinct in your comments (up to 100 words – a word count is given to assist you).

All these comments are automatically pulled through to the results page for incorporation into decision papers. You must edit these comments in the justification/mitigation column on the results page to be as useful as possible to decision-makers. These comments will also be available to the general public.

You should then complete the **Recommendation Box**. In this box, you should enter the recommendation arising from using the Tool that will be included in the paper. This recommendation should offer a very brief summary of the results of the Carbon and Co-Benefits Decision Support Tool and must refer to any important caveats, mitigation measures, and negative impacts that decision-makers should note. The text you provide in the Recommendation Box should also be copied into the recommendations section of the paper itself.
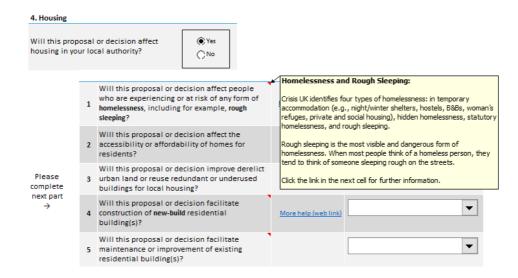
Recommendation - Key points for decision-makers			Word Count
SAMPLE TEXT - Overall positive on co-benefits, but mitigation efforts required in relation to managing land use and protecting biodiversity			20

Impacts Questionnaire

Impact Indicator	Result	Justification/Mitigation	Word Count
Equality and Inclusion	G	New social housing will be accessible by and at least in part targeted specifically at people with protected characteristics	19
Health	G	Safe, permanent, warm and healthy homes will be provided for households in housing need	14
Resilience and Adaptation	G	Delivery of net zero carbon homes at scale will contribute to the transformation of the local authority's housing stock in line with carbon reduction targets. Homes will be developed in line with Places for Everyone and other relevant policies on blue and green infrastructure	43
Housing	G	Safe, permanent, warm and healthy homes will be provided for households in housing need, including those experiencing homelessnes. Rents will be set at social rent levels, and accessed via local authority housing registers	32
Economy	G	Employment will be generated by design, financing, construction and supply chain associated with housing delivery, and by subsequent management and maintenance. Inward investment in the supply chain is expected as part of the drive to innovation. New skills and education will be needed to deliver via the new methods outlined	49
Mobility and Connectivity			0
Carbon, Nature and Environment	R	During construction phases, negative impacts are likely to the level of water, light or noise pollutants in the environment. Net zero carbon homes delivered at scale will have significant positive impacts on carbon emissions, and indirectly will lead to further reductions in costs for market delivery of net zero carbon homes	50
Consumption and Production	G	One of the key anticipated changes to be driven by this strategy is to minimise construction waste	17

10. Is it okay to have a red (negative) rating?

It is not expected that decisions will always be positive across all relevant Impact Areas. Highlighting negative impacts is a valuable and desired outcome from this process and facilitates consideration of complimentary/actions projects for mitigation.

11. Technical terms – definition and further information

Please note that the Tool includes 'information pop-outs' throughout to provide explanation of the various terms being used. There are also links to relevant policy documents and other resources.
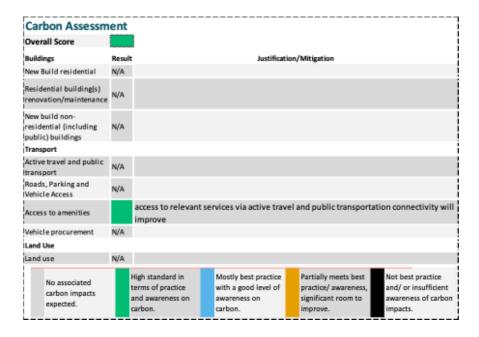

For ease of reference, **Appendix A** provides definitions of key terms.

12. Examples of completed assessments using the Tool

Here are three examples of the exported results page using the Carbon and Co-benefits Decision Support Tool.

Decision paper (GMCA): Greater Manchester One Network Procurement (25 Mar 2022)
Tool version: Carbon and Co-benefits Tool for Local Authorities v3

Recommendation - Key points for decision-makers

SAMPLE TEXT The proposed collaborative procurement of One Network will enable efficient services, and have overall positive impact in delivering services across the local authority

Impacts Questionnaire

Impact Indicator	Result	Justification/Mitigation
Equality and Inclusion		
Health	G	health services will improve
Resilience and Adaptation	G	resilience for relevant services and organisations will improve
Housing		
Economy	G	create a globally significant set of digital capabilities
Mobility and Connectivity	G	The Service will "light" much of the Local Full Fibre Network in a scalable manner
Carbon, Nature and Environment	G	This Service will provide equipment and capabilities that are more energy efficient than at present
Consumption and Production		
Contribution to achieving your local authority's Net Zero target		Connectivity, efficient services, less carbon/energy intensive
Further Assessment(s):		Carbon Assessment

G	Positive impacts overall, whether long or short term.	A	Mix of positive and negative impacts. Trade-offs to consider.	R	Mostly negative, with at least one positive aspect. Trade-offs to consider.	RR	Negative impacts overall.

Carbon Assessment

Overall Score		

Buildings	Result	Justification/Mitigation
New Build residential	N/A	
Residential building(s) renovation/maintenance	N/A	
New build non-residential (including public) buildings	N/A	
Transport		
Active travel and public transport	N/A	
Roads, Parking and Vehicle Access	N/A	
Access to amenities		access to relevant services via active travel and public transportation connectivity will improve
Vehicle procurement	N/A	
Land Use		
Land use	N/A	

	No associated carbon impacts expected.		High standard in terms of practice and awareness on carbon.		Mostly best practice with a good level of awareness on carbon.		Partially meets best practice/ awareness, significant room to improve.		Not best practice and/ or insufficient awareness of carbon impacts.

Decision paper (GMCA): [Delivering 30,000 Net Zero Carbon Social Rented Homes: Initial Implementation Plan](#) (25 Mar 2022)
Tool version: Carbon and Co-benefits Tool for Local Authorities v3

Recommendation - Key points for decision-makers

SAMPLE TEXT - Overall positive on co-benefits, but mitigation efforts required in relation to managing land use and protecting biodiversity

Impacts Questionnaire

Impact Indicator	Result	Justification/Mitigation
Equality and Inclusion	G	New social housing will be accessible by and at least in part targeted specifically at people with protected characteristics
Health	G	Safe, permanent, warm and healthy homes will be provided for households in housing need
Resilience and Adaptation	G	Delivery of net zero carbon homes at scale will contribute to the transformation of the local authority's housing stock in line with carbon reduction targets Homes will be developed in line with Places for Everyone and other relevant policies on blue and green infrastructure
Housing	G	Safe, permanent, warm and healthy homes will be provided for households in housing need, including those experiencing homelessnes Rents will be set at social rent levels, and accessed via local authority housing registers
Economy	G	Employment will be generated by design, financing, construction and supply chain associated with housing delivery, and by subsequent management and maintenance Inward investment in the supply chain is expected as part of the drive to innovation New skills and education will be needed to deliver via the new methods outlined
Mobility and Connectivity		
Carbon, Nature and Environment	R	During construction phases, negative impacts are likely to the level of water, light or noise pollutants in the environment Net zero carbon homes delivered at scale will have significant positive impacts on carbon emissions, and indirectly will lead to further reductions in costs for market delivery of net zero carbon homes
Consumption and Production	G	One of the key anticipated changes to be driven by this strategy is to minimise construction waste
Contribution to achieving your local authority's Net Zero target		Homes built under this strategy will be energy efficient, affordable, are likely to incorporate low and zero carbon energy generation & storage, clean technology innovation, be better adapted to climate change impacts, contrbute to increased biodiversity and the improvement of brownfield land quality and the use of sustainable blue and green infrastructure. Transforming the skills and capacity of the construction sector in the region will be central to the delivery of these objectives and will be supported by the implementation plans to be delivered

Further Assessment(s): Equalities Impact Assessment and Carbon Assessment

G	**Positive** impacts overall, whether long or short term.	A	Mix of **positive** and **negative** impacts. Trade-offs to consider.	R	Mostly **negative**, with at least one **positive** aspect. Trade-offs to consider.	RR	**Negative** impacts overall.

Carbon Assessment

Overall Score		

Buildings	Result	Justification/Mitigation
New Build residential		Energy performance of new residential buildings will be EPC A All homes will be net zero carbon - other options to Passivhaus may prove suitable
Residential building(s) renovation/maintenance	N/A	
New build non-residential (including public) buildings	N/A	
Transport		
Active travel and public transport	N/A	
Roads, Parking and Vehicle Access	N/A	
Access to amenities	N/A	
Vehicle procurement	N/A	
Land Use		
Land use		Biodiversity impact assessment will need to be undertaken on site by site basis

	No associated carbon impacts expected.	High standard in terms of practice and awareness on carbon.	Mostly best practice with a good level of awareness on carbon.	Partially meets best practice/ awareness, significant room to improve.	Not best practice and/ or insufficient awareness of carbon impacts.

Decision paper (GMCA): City Region Sustainable Transport Settlement (25 Mar 2022)
Tool version: GMCA Co-benefits Tool v11.2

Recommendation - Key points for decision-makers

SAMPLE TEXT - This bid will provide a funding stream for the Bee Network and its vision which directly promotes a clear pathway to GM's ambition to become carbon neutral by 2038 by providing excellent public transport and active travel choices for all, promoting sustainable travel behavioural change through integrated spatial, digital and transport planning; and supports the electrification of vehicles and public transport fleets.

Impacts Questionnaire

Impact Indicator	Result	Justification/Mitigation
Equality and Inclusion	G	The CRSTS pipeline has been prepared to make a major contribution to improving the quality of life of all our residents by helping to improve accessibility to jobs and essential services
Health	G	
Resilience and Adaptation	G	
Housing		
Economy	G	
Mobility and Connectivity	G	
Carbon, Nature and Environment	G	
Consumption and Production		
Contribution to achieving the GM Carbon Neutral 2038 target		This bid comprises a carefully constructed investment pipeline that directly addresses our shared drive to enhance productivity, level up and secure real reductions in carbon emissions, including 28,000 tonnes saving that can be secured through the conversion of 33% of the bus fleet to zero-emission vehicles
Further Assessment(s):		Carbon Assessment

G	Positive impacts overall, whether long or short term.	A	Mix of positive and negative impacts. Trade-offs to consider.	R	Mostly negative, with at least one positive aspect. Trade-offs to consider.	RR	Negative impacts overall.

Carbon Assessment

Overall Score		

Buildings	Result	Justification/Mitigation
New Build residential	N/A	
Residential building(s) renovation/maintenance	N/A	
New build non-residential (including public) buildings	N/A	
Transport		
Active travel and public transport		
Roads, Parking and Vehicle Access		No increase in conventional parking. Strategy will incentivise active travel and public transport and reduce traffic in town/city centres
Access to amenities		
Vehicle procurement		electric buses Whole life carbon costs to be condifered during procurement (electric buses)
Land Use		
Land use	N/A	

No associated carbon impacts expected.	High standard in terms of practice and awareness on carbon.	Mostly best practice with a good level of awareness on carbon.	Partially meets best practice/ awareness, significant room to improve.	Not best practice and/ or insufficient awareness of carbon impacts.

Appendix A

Definition of terms used in the Carbon and Co-benefits Decision Support Tool

Protected characteristics	Protected Characteristics: The Equality Act 2010 sets out nine protected characteristics: age, disability, gender, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation.
Public Services	This includes services ran by local authorities (e.g., core public services received by residents) and public sector organisations (e.g., community centres, allotment, community-led mental health services).
Community Cohesion	People from different backgrounds getting on well in the local area and treating each other with respect and consideration.
Wellbeing	This covers areas such as: maintaining physical health, healthy living, work-life balance, good habits, mental wellness, and financial wellbeing.
Provision or removal of infrastructure	This includes, for example, changes to bus route or Metrolink services and changes in access to Wi-Fi or mobile infrastructure that can affect residents' access to healthcare.
Environmental/climate, disaster, or public safety risks	Climate-related risks are created by a range of hazards. Some are slow in their onset (such as changes in temperature and rainfall), while others happen more suddenly (such as storms and floods). Disaster risk refers to the potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time. The level of risk depends on hazard, exposure and vulnerability. Public safety involves protecting and safeguarding the public, as well as responding to crime, disaster, and other potential dangers and threats.

Green and blue infrastructure	This refers to the green and blue spaces and nature-based features within and between urban areas in your local authority, such as parks, river valleys, gardens etc.
Homelessness	Crisis UK identifies four types of homelessness: in temporary accommodation (e.g., night/winter shelters, hostels, B&Bs, woman's refuges, private and social housing), hidden homelessness, statutory homelessness, and rough sleeping. Rough sleeping is the most visible and dangerous form of homelessness. When most people think of a homeless person, they tend to think of someone sleeping rough on the streets
New build	New homes being built will need to produce lower carbon emissions and use less energy. England, Scotland, Wales and Northern Ireland are introducing their own building regulation changes. In England, Future Homes Standard requires that from 2025, new homes will need to produce 75-80% CO_2 emissions than current standards. In Scotland, energy standards require new builds to improve performance target and reduce emissions by 32% and for new buildings to have zero emissions heating systems from 2024. In Wales, Net Zero Wales Low Carbon Delivery Plan 2021-2025 (New build homes) sets out the decision to introduce "37% reduction (compared with current standards) in carbon emissions for new dwellings from 2022". In Northern Ireland, new domestic buildings will need to achieve a 40% reduction in carbon emissions from 2022.
Residential buildings	Residential buildings include all forms of medium-long term accommodation e.g. private lets, owner occupied, student accommodation etc.

Good jobs	Good jobs refer to good quality and well-paid work, where people have the opportunity to train and progress; with secure work but flexibility to fit individual circumstances; where employment rights are protected; and working conditions contribute to health and well-being
Economic assets	Local businesses, as well as voluntary, community and social enterprises may benefit (e.g., gain income) from owning, using, or holding economic assets. Focusing development in key economic locations, improving sustainable transport, and access for local people to jobs in these locations can help maximise potential economic assets.
Inward Investment	Inward investments include both foreign direct investment and UK investment in your local authority. Activities that help attract and retain inward investment includes, for example, promoting your area as a business location, gaining new corporate and capital investment, and providing aftercare services to investors. Inward investments can help create and safeguard jobs in the region and contribute to internationalisation.
Shared Transport	This includes bike, scooter and electric vehicle sharing schemes such as car-clubs, ride share and bikesharing.
Air Quality	Local air quality is primarily affected by pollutants from vehicles (burning fuel and braking) and combustion processes (e.g. industry and home fires). Pollutants such as particulate matter (e.g. PM10 and PM2.5 - small particulate matter of 10 and 2.5 microns or less in diameter), ozone, nitrogen dioxide and sulphur dioxide can cause cancers and cardiovascular and respiratory diseases that lower life expectancy in areas with poor air quality.
Natural sinks	Natural sinks absorb carbon dioxide and serve as a storehouse or 'sink' of carbon. Examples of natural sinks are trees, vegetation, and peatland.

Biodiversity	Biodiversity refers to the number and types of plants and animals that exist in a particular area.
Biodiversity Impact Assessment	A subset of Environmental Impact Assessment that assesses the impact of a project on biodiversity - including evaluating potential loss and producing mitigation measures.
Onsite renewables	Onsite renewables are technologies that produce electricity or recover heat from the local environment, or make use of sustainable biomass.
Resource efficiency	Resource efficiency means using the Earth's limited resources in a sustainable manner while minimising impacts on the environment.
Circularity	Circularity - Sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.
Energy Performance Certificate (EPC)	An Energy Performance Certificate (EPC) indicates how energy efficient a property is. Properties are rated between A to G. Rating G (red colour) is most inefficient, whilst rating A (dark green colour) is very energy efficient.
Passivhaus	Passivhaus is an international energy efficiency standard to ensure high levels of indoor comfort with minimal heating and cooling requirements. It is characterised by a "fabric first approach" in which high levels of insulation and airtightness is prioritised. Energy costs are significantly lower for occupants, resilience to energy network disruption is higher and carbon emissions are almost zero.
Active Travel	Active travel includes cycling, walking and wheelchair/mobility aide options. "Improved" also include improving access for prams, mobility aides and those with sight loss.
Whole life costs	Whole-life costs refer to the sum of all costs associated with a product from purchase and during period of use.