

Welcome to CDP-ICLEI Track 2022

Governance

0. Governance

(0.1) Provide details of your jurisdiction in the table below.

Response

Administrative boundary of reporting government^

City/Municipality

Next highest level of government

National

Next lowest level of government

Town

Land area of the jurisdiction boundary (in square km)^

139.5

Percentage range of land area that is green space

21-30%

Current (or most recent) population size^

242,200

Population year^

2021

Projected population size

275,624

Projected population year

2040

Select the currency used for all financial information reported throughout your response^

GBP Pound Sterling

(0.2) Provide information on your jurisdiction's oversight of climate-related risks and opportunities and how these issues have impacted your jurisdiction's planning.

- 📎 Sunderland_Low_Carbon_Framework1.pdf
- 📎 12-01-Appendix 1 Low Carbon Action Plan Refresh 2022.pdf
- 📎 CSDP_2015-2033.pdf

Response

Select the processes that reflect your jurisdiction's oversight of climate-related issues

Council (or equivalent) is informed by relevant departments, committees and/or subcommittees about climate-related issues

Relevant departments, committees and/or subcommittees are informed by management about climate-related issues

Climate-related issues are considered by government when undertaking plans and/or strategies

Climate-related issues are considered by government when undertaking budgeting and/or major capital expenditures

Climate-related responsibilities are assigned to a committee(s) or a subcommittee(s) in government

Climate-related responsibilities are assigned to management-level positions in government

Provide further details on your jurisdiction's oversight of climate-related issues

In recognition of the Paris Agreement, Sunderland City Council declared a climate emergency in 2019. The climate emergency declaration committed Sunderland to help combat climate change by reducing citywide emissions and helping global temperature rise stay below 1.5°C by 2050, compared to pre-industrial levels. In 2020 Sunderland's 2030 Shadow Board, which is chaired by the Council's Leader and includes the Council's key partner organisations, prepared the Low Carbon Framework (available at https://www.sunderland.gov.uk/media/22959/Sunderland-Low-Carbon-Framework/pdf/Sunderland_Low_Carbon_Framework1.pdf?m=637461416504170000) which set out their approach for Sunderland to achieve carbon neutrality by 2040 and was adopted in December 2020. This includes seven strategic priorities: Our Behaviour, Policies and Operational Practices, An Energy Efficient Built Environment, Renewable Energy Generation and Storage, Low Carbon and Active Transport, Green Economy and Consumption and Waste. The Council endorsed the Low Carbon Framework in January 2021 and at the same time adopted its Low Carbon Action Plan (LCAP) which included a target for the Council to become carbon neutral by 2030. The Council has also recently developed a more robust version of its own LCAP, which was approved by Cabinet in July 2022 and is available at <https://committees.sunderland.gov.uk/committees/CMIS5/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShgo=4vUxQHuhLCfa754Og%2bWTgL41DzgOrRSMvUHir3%2b1SKL40Gxbp4rczw%3d%3d&rUzwRPf%2bZ3zd4E7lkn8Lyw%3d%3d=pwRE6AGJFLDNlh225F5QMaQWCtPHwdhUfCZ%2fLUQzgA2uL5jNRG4jdQ%3d%3d&mCTIbCubSFfXsDGW9IXnlg%3d%3d=hFflUdN3100%3d&kCx1AnS9%2fpWZQ40DXFvdEw%3d%3d=hFflUdN3100%3d&uJovDxwdjMPoYv%2bAJvYtyA%3d%3d=ctNJFf55vVA%3d&FgPIIEJ>

YlotS%2bYGoBi5oIA%3d%3d=NHdURQburHA%3d&d9Qjj0ag1Pd993jsyOJqFvmyB7X0CSQK=ctNJFf55vVA%3d&WGewmoAfeNR9xqBux0r1Q8Za60lavYmz=ctNJFf55vVA%3d&WGewmoAfeNQ16B2MHuCpMRKZMwaG1PaO=ctNJFf55vVA%3d. Progress in relation to the Council's LCAP is regularly reviewed.

In addition to the above, Sunderland City Council recently reaffirmed its commitments to UK100, by signing their new Net Zero pledge. Signatories of this pledge are known as the 'Net Zero Local Leadership Club' and are working collaboratively to ensure net-zero targets are reached as soon as possible. The commitment to UK100 raises Sunderland City Council's and citywide ambitions, to achieve net-zero greenhouse gas emissions by 2030 and 2045 respectively.

Shadow Board partners are working collectively to drive Sunderland's commitment to tackling climate change. The partnership meets quarterly to ensure that best practice is shared, that duplication is avoided, and that resource efficiency, joint working and impact are maximised.

As well as taking collective actions each partner is developing their own Low Carbon Action Plan and carrying out initiatives to enable the city to reach its low carbon goals. The Low Carbon Framework is underpinned by these individual partner Action Plans.

The Council has a Low Carbon Team which supports climate action work across the organisation with a Senior Sustainable Development Officer, three Engagement Officers and an Intelligence & Performance Officer, increasing awareness with businesses and residents, as well as reporting on progress through environmental data. The team supports carbon mitigation projects, working with the Council's Carbon Task Group to deliver carbon reductions across each of the 7 strategic priorities.

Describe how climate-related issues have impacted your jurisdiction's master/development planning

The overarching spatial vision of Sunderland's Core Strategy and Development Plan (CSDP – available at https://www.sunderland.gov.uk/media/22171/Core-Strategy-and-Development-Plan-2015-2033/pdf/CSDP_2015-2033.pdf?m=637159725864470000) is that by 2033, Sunderland will be a place which is resilient to climate change, has maximised the opportunities for renewable energy, embraced sustainable design principles and has reduced the impacts of flooding on homes and businesses. The CSDP includes a number of planning policies which seek to reduce the impact of climate change in conjunction with the overarching spatial vision. This includes the following planning policies: CSDP Policy WWE1, which supports the delivery of decentralised, renewable and low carbon energy, and CSDP Policy BH2, Sustainable Design and Construction, which provides various relevant criteria (which amongst other things) seeks to maximise energy efficiency, reduce waste and aims to conserve water resources and minimise vulnerability to flooding.

It should be noted that when the CSDP was being prepared a Sustainability Appraisal (SA) was undertaken to ensure that the CSDP was considered sustainable. The SA

included a strategic objective that ensured that any climate related issues were taken into consideration when preparing the CSDP.

The CSDP also requires that major development, at the planning application stage, includes a Sustainability Statement which clearly sets out how the development incorporates sustainable resource management and high environmental standards.

Alongside, the CSDP, the Council has adopted a number of Supplementary Planning Documents (SPDs) which sit alongside the CSDP. The Development Management SPD provides guidance which encourages the use of appropriate renewable energy initiatives within residential development. In addition, the Riverside Sunderland SPD, sets out a comprehensive vision and masterplan for the Riverside Sunderland area, encouraging where possible the development of a district heating infrastructure network. Also, the South Sunderland Growth Area (SSGA) (SPD) sets out a comprehensive vision for the SSGA area. It includes the principle that the creation of a low carbon community is a priority at the SSGA. In order to achieve this, all development should seek to (amongst other things) where feasible incorporate green roofs and seek to achieve or exceed government targets regarding sustainable construction.

These plans are discussed in more depth in question 7.2.

Describe how climate-related issues have impacted your jurisdiction's financial planning

Low Carbon has been embedded as a cross cutting theme across all of the City Council's activity. As a result of this, carbon considerations are actively considered in relation to the Council's capital programme.

Through the Council's Carbon Task Group, the lead for each of the 7 strategic priorities is also ensuring that carbon is considered in the day-to-day activity across the organisation, including revenue and capital programmes of work. This helps to promote cross-organisational working on the Low Carbon agenda across the Council.

In addition to the above, the Council also has a dedicated £1 million budget for Low Carbon activity and projects.

The Council also looks to maximise external funding opportunities to support the delivery of its Low Carbon goals and the Council's lead officer for external funding attends meetings of the Carbon Task Group.

Describe the risks to your jurisdiction related to the transition to a low-carbon economy

There are several risks in Sunderland related to the transition to a low-carbon economy. Firstly, there is a need for economic growth in Sunderland, to improve the quality of life for our residents, including attracting more businesses and creating more jobs. For the city to achieve carbon neutrality, all new and existing businesses need to support this

ambition and be able to make their contribution. Some businesses may have conflicting priorities, particularly during post-COVID economic recovery, the emerging cost of living crisis, and as a result of current energy cost rises, which may delay the transition to a low carbon economy.

Secondly, there is a demand for road transport to be upgraded to accommodate planned population growth and the current increase in the popularity of the private car, linked partly to the impact of COVID-19. During the COVID-19 pandemic, the modal share for public transport has also fallen significantly and has not yet returned to pre-pandemic levels. Public transport is a key aspect of a low carbon city, meaning its modal share therefore needs to be rebuilt.

Fuel poverty is also a significant issue in Sunderland. According to the UK Government, 15,110 children in Sunderland live in low-income families in 2021 (30.8%) and 18,513 households in Sunderland are in fuel poverty as of 2020. There is also a high degree of inequality within the city, with significant differences in the quality of life between different wards in the city with health inequalities increased during the pandemic. A transition to a low carbon economy requires the scale up of green technologies, many of which can be costly. It is important that Sunderland takes a pragmatic approach when tackling greenhouse gas emissions particularly in relation to vulnerable and low-income households, and works to ensure the well-being of residents.

Penultimately, the transition to a low carbon economy requires a scale up of renewable energy technologies such as wind turbines and solar PV. The implementation of this infrastructure can at times take place on greenbelt land, which can reduce biodiversity.

Finally, the transition to a low carbon economy is a significant challenge for any city, particularly within limited resources. Committing to net zero comes with a substantial reputational risk, should the city fail in meeting this ambition.

(0.3) Report how your jurisdiction assesses the wider environmental, social and economic opportunities and benefits of climate action.

Response

Does the jurisdiction assess the wider opportunities/benefits of climate action?

Yes, wider opportunities/benefits are assessed for many climate actions

Outline how your jurisdiction quantifies the impact of these wider opportunities/benefits

Wider opportunities/benefits are considered at the action planning stage

Wider opportunities/benefits are considered at the action implementation stage

Wider opportunities/benefits are considered at post-implementation monitoring and evaluation stage

Wider opportunities/benefits are quantitatively assessed

Wider opportunities/benefits are qualitatively assessed

Describe the wider opportunities/benefits of climate action the jurisdiction has identified

Wider opportunities / benefits include:

- Reducing fuel poverty by supporting residents to improve the energy performance of their homes and to reduce heating costs;
- Providing cleaner air by supporting a shift to more sustainable transport modes in the city;
- Creating safer streets by providing improved walking and cycling conditions and reducing the use of motor vehicles;
- Developing a green and successful economy - by supporting the city's green economy to grow, all businesses to become more sustainable, as well as adding to the city's inward investment offer through enhancing the city's special landscape mixture of seaside, river estuary, heritage, wildlife and geology;
- Encouraging active travel and sustainable behaviour will benefit physical and mental health, which in turn will reduce the impact on healthcare services and help reduce health inequalities;
- Helping to eliminate food poverty by expanding local food networks and increasing the availability of fresh and seasonal food;
- Reducing social isolation by enabling residents to have increased opportunities to be involved in community projects, which can raise civic pride, increase community wealth-building and encourage active and healthier lifestyles;
- Reducing waste benefitting the environment and saving money for residents by reducing the volume of food thrown away. Using our waste in smarter ways could also support the growth of green business;
- Developing green infrastructure helping to reduce the potential for flash flooding, help to cool our city in the summer, support wildlife diversity, tourism and provide quality greenspaces for local people to enjoy;
- Developing varied local sources of energy which will help to ensure that the city has greater energy security.

Outline if and how your jurisdiction ensures the equitable distribution of climate action opportunities/benefits

Yes, the jurisdiction is collecting disaggregated or spatial data on the impact of climate actions

Yes, the jurisdiction is engaging with frontline communities most impacted by climate change

Yes, the jurisdiction is designing or implementing climate actions that address the needs of frontline communities most impacted by climate change

Please provide evidence and/or more details of how your jurisdiction is ensuring inclusive/equitable climate action

Sunderland aims to ensure equitable and inclusive climate action. This is considered for both climate mitigation and adaptation.

Regarding mitigation, Sunderland is delivering the Warm Homes Fund (WHF) project, targeting off-gas fuel poor properties in the private sector with energy efficiency and fuel

poverty measures.

Sunderland used disaggregated and spatial data to identify vulnerable properties via GIS, including the national government's open-source Energy Performance Certificate (EPC) database and Lower Super Output Area (LSOA) fuel poverty data, as well as internal Unique Property Reference Number (UPRN) data. 1,000 eligible properties were identified which were likely to be most vulnerable to fuel poverty. A copy of the mapping data for the WHF project is attached. WHF Lot 1 aims to fit 135 all-electric air source heat pumps in the low efficiency / low-income properties that currently have old inefficient electric storage heaters. As part of the process a whole-house, fabric-first approach is adopted meaning WHF qualifying properties will be suitably insulated from other funding streams (e.g., ECO4) to enable installation of the heat pump. Lot 2 aims to deliver complementary energy efficiency advice and support targeting these properties, bringing together local organisations (Groundwork North East and Citizens Advice Bureau as community partners) to provide energy efficiency advice, debt advice and information on health related programmes.

Young people will witness and live with the most severe impacts of climate change in the future. Therefore, Sunderland views it as important to engage young people in the conversations regarding this issue. Climate change was voted the most important issue by Sunderland's young people at the Young People's State of the City debate (November 2019 - over 10,000 votes) and it is vital that the youth voice is part of the conversations in planning sustainable futures in the city. The 2030 Shadow Board has set up the the Environmental, Green and Sustainable (EGS) young people's group which first met in October 2021. EGS brings together young people from primary, special and secondary schools alongside reps from Sunderland Youth Council, young people's minority forums, detached youth work settings, Sunderland College, and the University of Sunderland to provide a forum where young people's opinions on climate change can be heard. The group was developed by young people and is inclusive. Members are supported to meet and discuss the city's plans and feed into these. Members sit on the 2030 Shadow Board and feed into the group discussions.


Discussions have also taken part with University of Third Age representatives.

Regarding adaptation, one of the social strategic and specific objectives of Sunderland's Local Flood Risk Management Strategy (LFRMS) 2016 (available at https://www.sunderland.gov.uk/media/23162/Local-flood-risk-management-strategy/pdf/Sunderland_LFRMS_-_Final_Version_-_Complete.pdf?m=637502096317830000 and explained in more depth later) is to protect the most vulnerable communities and increase resilience to current and future flood risk from climate change. The LFRMS aims to: investigate flooding incidents within the community; prioritise schemes; improve community resilience and emergency planning and; implement quick win measures and maintenance issues.

As part of the 'Our Policies and Operational Practices' strategic priority within the Council's LCAP, the Council has mapped existing green spaces across Sunderland and identified areas with less greenspace. This will help to ensure citywide equity and

inclusivity when planning nature-based solutions for climate adaptation. Voluntary and Community Sector (VCS) Networks are in place for each of the 5 geographical areas of the city, coordinated by the Sunderland Voluntary Sector Alliance. Local groups and organisations working at grass roots level are consulted with during the development and delivery of Area Investment Plans and priorities, and commissioned to support delivery of support services within communities, maximising assets and increasing opportunities for social value-added. The views and input of all sectors of the community are considered, and many of the groups working in the most deprived neighbourhoods are contributing to changing behaviours and strategies to address climate change. The Sunderland Voluntary Sector Alliance act as a conduit and two-way flow for consultation and information sharing on citywide initiatives and issues, via the five area networks. Over 600 organisations are signed up as Members of the Sunderland VS Alliance and cover a breadth of service and subject areas for vulnerable target audiences.

Finally regarding transport, Sunderland's Local Cycling and Walking Infrastructure Plan (LCWIP) aims to further develop walking and cycling networks, with a key focus being on the areas with the greatest potential impact to increase active travel rates.

 LCWIP_A4_Final_Version_September_2021_1_.pdf

 Sunderland_LFRMS_-_Final_Version_-_Complete (1).pdf

(0.4) Report on your engagement with higher and/or lower levels of governments regarding your jurisdiction's climate action.

Climate component

Climate risk and vulnerability assessment

Level of governments engaged in the development, implementation and/or monitoring of component

National-level government

Outline the purpose of this engagement

To facilitate the integration of this component into the National Adaptation Plan (NAP)

Comment

Sunderland's Level 1 Strategic Flood Risk Assessment (SFRA – published in November 2020) has been carried out in accordance with the central Government's latest development planning guidance including the revised National Planning Policy Framework (NPPF) (2019) and flood risk and planning policy guidance, the Flood Risk and Coastal Change Planning Practice Guidance (FRCC-PPG).

The Northumbria Community Risk Register, which covers the whole of Northumbria including Sunderland, is based on the National Risk Register produced by central Government. This covers all climate hazards for the region.

More detail on these risk assessments, including links and attachments, can be found in section 1.

 AD.25_Strategic_Flood_Risk_Assessment_Level_1 (1).pdf

Climate component

Community-wide GHG emissions inventory

Level of governments engaged in the development, implementation and/or monitoring of component

National-level government

Outline the purpose of this engagement

To collect data and/or feedback from other levels of government to inform its development

Comment

The Department for Business, Energy & Industrial Strategy (BEIS) provide publicly available greenhouse gas emission data to all local authorities in the UK. Alongside the Scatter greenhouse gas emission data, this data is utilised by Sunderland to help to inform progress against the goals of the Paris Agreement.

In addition to greenhouse gas data, central government also provide useful data regarding transport, energy and waste which all contribute to Sunderland City Council's environmental performance monitoring.

Climate component

Climate action plan

Level of governments engaged in the development, implementation and/or monitoring of component

State/Regional-level government

Outline the purpose of this engagement

To facilitate the integration of this component into the Nationally Determined Contribution (NDC)

Comment


The seven local authorities across the North East have come together to establish the North East Net Zero Partnership reflecting shared commitments to tackling climate change. The forum will provide an environment to share experience and expertise as well as to identify areas where objectives are aligned and action can be taken forward more effectively across a larger geography. The partnership will enable collaboration

across all sectors in shared priority areas. As a first action a joint application was submitted in 2022 for a behaviour change project to develop across the region.

In addition to the above, Sunderland is also working with neighbouring local authorities to develop and deliver wider regional level climate related plans and projects. This includes a Bus Service Improvement Plan, the North East Transport Plan, the South Tyne and Wear Joint Municipal Waste Strategy and the North East Community Forest.

Sunderland is also working with the UK government to deploy a number of funding streams in line with the key priorities of the citywide Low Carbon Framework and the Council's Low Carbon Action Plan. For example, The Levelling Up fund has is being used for several low carbon developments in Sunderland, such as the Housing Innovation Construction Skills Academy (HICSA), Vaux Housing and at Sunnyside. HICSA will upskill and train people in low carbon technology to support the delivery of Sunderland's low carbon ambitions for new build and retrofitting. Vaux Housing is providing 132 new homes to Future Homes Standard and is utilising solar PV, air source heat pumps and battery technology. Vaux housing will also be connected to a smart energy network to effectively manage consumption, reduce waste and mitigate impact of rising energy costs. Finally, it is expected that Sunnyside will utilise MMC solutions for homes, with low embodied carbon, renewable energy technology, and promotion of the circular economy. It is hoped that the funding will also help support the Council's Local Cycling and Walking Infrastructure Plan (LCWIP). In addition to the Levelling Up Fund, Sunderland City Council has used the Public Sector Decarbonisation Scheme Funding to decarbonise municipal operational buildings and are using the Social Housing Decarbonisation Fund to decarbonise social housing.

Finally, Sunderland also works with UK government to implemented Modern Methods of Construction (MMC) in development in new houses.

 North East Community Forest Bid 26.02 Compressed (2).pdf

 TNE-BSIP_FINAL.pdf

 STWWPWasteManagementStrategy202125.pdf

Climate component

Climate mitigation target

Level of governments engaged in the development, implementation and/or monitoring of component

National-level government

Outline the purpose of this engagement

To facilitate the integration of this component into the Nationally Determined Contribution (NDC)

Comment

The UK has a target of being net zero as a nation by 2050 and it is widely acknowledged that cities are key to this. It is also widely acknowledged that local partnerships, such as the Sunderland City Partnership, are in a unique position to help reduce citywide greenhouse gas emissions. As well as knowing the detail, geography, demographics and needs of their local areas well, cities, local authorities and city partnerships have a strong influence over a proportion of the emissions in their area. The Local Government Association predicted in 2021 that Local Authorities alone have a direct or strong influence over 35% of area-wide emissions.

In 2020, with the national target of 2050 in mind, Sunderland set an ambitious goal of to become a carbon neutral city by 2040. Achievement of this target will contribute to the UK's 2050 goal.

In addition to the above, Sunderland City Council reaffirmed its commitments to UK100 in February 2022, by signing their new Net Zero pledge. Signatories are working collaboratively to ensure net-zero targets are reached as soon as possible, committing the city to net-zero greenhouse gases by 2045 at the latest.

Climate component

Climate action plan

Level of governments engaged in the development, implementation and/or monitoring of component

National-level government

Outline the purpose of this engagement

The development of this component is required by the national government (e.g., by law, regulation and/or agreement)

To facilitate the integration of this component into the National Adaptation Plan (NAP)

Comment

Under the Flood and Water Management Act 2010 (FWMA), Sunderland City Council became a Lead Local Flood Authority (LLFA). As an LLFA, Sunderland City Council has key responsibilities to manage flood risk from localised sources across the city and a duty to develop, maintain, apply and monitor a Local Flood Risk Management Strategy.


Sunderland's Local Flood Risk Management Strategy, last updated in 2016, has been developed with strategic objectives and guiding principles which are consistent with the Environment Agency's (EA) National Strategy. Furthermore, the LFRMS has been prepared with reference to the Local Government Group Framework and is also consistent with the National Flood and Coastal Erosion Risk Management (FCERM) Strategy.

In addition to the above, under the Coastal Protection Act 1949, Sunderland City Council also has a legal duty to monitor and manage the coastline and coastal erosion.

Aside flooding, Sunderland are part of the North East Community Forest (NECF) Partnership who aim to plant 500 hectares of trees by 2025, and double canopy cover in the region by 2050. The NECF was launched in February 2022 and during the first planting season for the NECF, Sunderland planted 15,830 tree and shrub plants across a 7.37-hectare land area. Across this full area, wildflower grasses were also sown. Sunderland aim to plant 10 hectares across its land area in the 2022/23 planting season.

Also, Sunderland City Council aim to reduce mortality due to air pollution each year. This is a common national goal through Public Health England. More information can be found at <https://fingertips.phe.org.uk/profile/health-protection/data#page/0/gid/1000002/pat/6/ati/102/are/E08000024/iid/93463/age/288/sex/4/cid/4/tbm/1>.

Finally, Sunderland City Council aim to reduce the number of residents within the city who are fuel poor. This is also a common national goal through Public Health England. More information can be found at <https://fingertips.phe.org.uk/profile/wider-determinants/data#page/0/gid/1938133043/pat/6/ati/102/are/E08>

 Sunderland_LFRMS_-_Final_Version_-_Complete (1).pdf

(0.5) Report your jurisdiction's most significant examples of collaboration with government, business, and/or civil society on climate-related issues.

Primary entity collaborated with

Business
Other, please specify
2030 Shadow Board Partners

Mechanisms used to collaborate

Collaborative initiative
City business partnership platform
Convening industry groups
Reporting of climate and/or environmental data
Project delivery - Public Private Partnership
Policy and regulation development/ implementation
Climate action plan implementation

Areas collaboration focused on

Emissions reduction
Adaptation
Resilience
Energy
Transport (Mobility)
Waste

Building and Infrastructure
Industry
Agriculture
Forestry
Landscape and jurisdictional approaches
Ecosystem restoration
Food
Water
Public health
Natural environment
Social Services
Education

Description of collaboration

Sunderland City Council has set up the 2030 Shadow Board with representatives from key organisations across the city, including the local NHS Foundation Trust, the University of Sunderland, Sunderland College (Education Partnership NE), North East England Chamber of Commerce (an independent business membership organisation representing over 3,000 businesses in North East England), Sunderland Youth Council as well as cross-party Elected Member representation from each Group on the City Council. The 2030 Shadow Board's purpose is to work collectively to drive forward Sunderland's ambitions and commitment to tackling climate change.

Each partner is continuing to develop its own action plan and is actively carrying out low-carbon initiatives to help enable the city to reach its low carbon goals. The partnership meets on a quarterly basis and ensures that best practice is shared, and joint working is maximised.

While the EGS group referred to earlier has been developed with significant input from Together for Children, the College and University, all partners on the 2030 Shadow Board committed to support its work and identify opportunities to engage young people through their own activity. This includes the NE England Chamber of Commerce. The city's Sunderland Business Partnership has also discussed the Low Carbon Framework and continues to consider on an ongoing basis ways in which it can help achieve the city-wide target of Sunderland being carbon neutral by 2040 and work has recently begun with Sunderland Business Improvement District on a similar basis.

More information regarding the EGS group can be found at <https://www.mysunderland.co.uk/article/20627/Environmental-Green-and-Sustainable-Group>

Other entities collaborated with

Academia
Vulnerable population groups
Education sector
Health care
Real Estate

Primary entity collaborated with

Business
Other, please specify
SMEs

Mechanisms used to collaborate

Economic development
Funding (grants)
Technical assistance
Project implementation and management
Climate action plan implementation

Areas collaboration focused on

Emissions reduction
Resilience
Energy
Building and Infrastructure
Industry

Description of collaboration

Sunderland City Council delivers the Business Renewables Energy Efficiency Sunderland (BREEZ) project for Small and Medium-Sized Enterprises (SMEs). The overall objective of BREEZ is to reduce energy consumption and enable carbon reduction in a compliant and cost-effective way. This is achieved by upgrading old, inefficient systems with new, energy-efficiency upgrades that have been approved and agreed prior to their installation. This is then followed by upgrading old, inefficient systems with new, energy-efficiency measures that have been recommended in the audit. Typically, BREEZ offers 50% grant funding towards microgeneration (e.g. Photovoltaics), Insulation, low-carbon heating upgrades and LED lighting. Grant support for upgrading business process equipment may also be available. As of summer 2022, 124 SMEs have been engaged to date (including audits / advice and guidance / grants awarded). 19 grants have been claimed with an average value of £7,866.

In addition to the BREEZ project, Sunderland was also part of the Business Energy Saving Team (BEST) which ran until March 2022. BEST was a project funded by the European Regional Development Fund (ERDF) and delivered by local authorities in North East England. The BEST team provided businesses with a full energy audit, designed to help identify ways to save energy, money, and carbon emissions. If businesses met certain criteria the BEST team could also provide a grant to help cover costs. As of the end of BEST in March 2022, Sunderland City Council lead the regional performance table, with 21 approvals, 14 grants claimed, and a total project value of £130,000 invested in energy efficiency improvements saving 327 tonnes of carbon equivalent.

Both BREEZ and BEST involve close cooperation between project staff from the Council and the wider Business Investment Team and businesses.

More information on BREEZ can be found at <https://www.sunderland.gov.uk/Breez>.

Other entities collaborated with

Other, please specify
ERDF

Primary entity collaborated with

Business
Other, please specify
Transport

Mechanisms used to collaborate

Collaborative initiative
Capacity development
Multi-jurisdictional regional collaboratives
Project implementation and management
Project delivery - Public Private Partnership
Climate action plan implementation

Areas collaboration focused on

Emissions reduction
Resilience
Energy
Transport (Mobility)


Description of collaboration

Sunderland City Council is working with Nexus and bus operators to improve bus service infrastructure, and bus services by low/zero carbon bus vehicles, real time information and integrated ticketing. Sunderland City Council is also working with neighbouring local authorities to enable cross boundary ticketing and Wi-Fi improvements, making the bus a more attractive choice.

Policy ST4 within Sunderland's Draft Allocation and Designations Plan (available at https://www.sunderland.gov.uk/media/22878/AD-01-Allocations-and-Designations-Plan-2020/pdf/AD.01_Allocations_and_Designations_Plan_20201.pdf?m=6374355582678000) safeguards land at Washington North, Washington East, Ryhope and Doxford Park to support the future expansion of the Tyne & Wear Metro and rail network in the city.

Both a Tyne and Wear Rail and Metro Strategy and a North East Bus Service Improvement Plan have been produced through work with neighbouring local authorities. These are discussed in greater detail in question 7.2.

 TNE-BSIP_FINAL.pdf

 North-East-Rail-and-Metro-Strategy.pdf

Other entities collaborated with

Regional government

Primary entity collaborated with

Civil society

Residents

Mechanisms used to collaborate

Knowledge or data sharing

Climate action plan implementation

Areas collaboration focused on

Emissions reduction

Adaptation

Resilience

Energy

Transport (Mobility)

Waste

Building and Infrastructure

Industry

Agriculture

Forestry

Landscape and jurisdictional approaches

Ecosystem restoration

Food

Water

Public health

Natural environment

Social Services

Education

Description of collaboration

Within Sunderland's Low Carbon Framework, Strategic Priority 1 (Our Behaviour) seeks to engage key groups within Sunderland to encourage positive behaviour change and reduce individual carbon footprints. To improve engagement Sunderland City Council drafted an engagement plan as a dynamic document to shape this activity. It identifies key target groups: residents; children and young people; voluntary community sector; employees; partners; and businesses. The plan outlines the ways the Council would like to engage with each group to gather their views, involve them in decision making support them in taking action to limit climate change.

All strands aim to:


understand the awareness of climate change among the target group and their feelings about Sunderland's response to it;

actively listen to and engage target groups in co-creating solutions and participating in decision-making processes on climate action;

- share reliable information through diverse and accessible formats on the climate crisis and its likely future impacts and on the local context and response;
- support individuals and organisations to make informed decisions and understand the Carbon impact of these, including through sharing best practice and case studies;
- signpost target groups to support from the Council and other local, regional, national and international organisations on how to live and work more sustainably;
- facilitate connections between target groups and others in the city working on these topics

Concrete actions are outlined for each different group and at varying stages of delivery. One example for each group includes:

- conducting residents' surveys and research to understand current attitudes locally and developing a bespoke Low Carbon communications strategy and monthly plan accordingly;
- founding a young people's forum to bring together young people from primary and secondary schools as well as Sunderland college, the University of Sunderland, the Students' Union, and minority youth groups to meet quarterly to discuss climate action; to participate in Low Carbon volunteering opportunities; to send representation to the city's 2030 Shadow Board; and to be consulted on city-wide Low Carbon developments such as the city-wide low carbon website, a new sustainable travel app being developed by the Council and a local chartermark being rolled out to all schools and youth services on Food and Nutrition;
- working in partnership with Sunderland's Voluntary Sector Alliance to include Low Carbon in priorities, to feature Low Carbon in regular newsletters to 600+ organisations; to support sustainability-related activities with volunteering capacity, and to share and support funding opportunities;
- ensure that Low Carbon is featured in internal communications and on staff social media and intranet sites and to recruit staff from different directorates to act as future 'Green Champions' within the organisation to receive and cascade information, activities and opportunities such as ways to use staff volunteering days for Low Carbon activities and to identify potential areas for improvement;
- working with Partner organisations to support benchmarking and share data and updates which support delivery of the city's Low Carbon Framework;
- sharing opportunities for engagement in city-wide programmes such as the newly-launched Refill Sunderland SUP minimisation scheme.

 Sunderland_Low_Carbon_Framework1.pdf

Other entities collaborated with

NGO and associations

Education sector

Other, please specify

young people; employees; all businesses in general

Primary entity collaborated with

Business
Other, please specify
Transport

Mechanisms used to collaborate

Collaborative initiative
Economic development
Financing (investment)
Cleaner production industry support
Project implementation and management
Project delivery - Public Private Partnership
Climate action plan implementation

Areas collaboration focused on

Emissions reduction
Energy
Transport (Mobility)
Building and Infrastructure
Industry

Description of collaboration

Sunderland is seeking to facilitate investment in innovation and production linked to electrification of advanced manufacturing, reflecting the city's key role in EV production and battery manufacturing, as well as its role to date working with businesses as well as partners in the region including Newcastle University and the North East Automotive Alliance which has resulted in the Driving the Electric Revolution (DER) Industrial Centre NE being located in Sunderland adjacent to Nissan and the International Advanced Manufacturing Park (IAMP).

The 'Driving the Electric Revolution North East' Centre in Sunderland is one of four across the UK, which are part of a large-scale Government-backed programme run by a consortium led by Newcastle University. It is specifically intended to facilitate projects in the field of Power Electronics, Machines & Drives and enable the UK to capture part of the significant global market opportunity which electrification represents. The Centre for Driving the Electric Revolution (DER) in the North East is intended to provide open access facilities, combining state-of-the-art equipment with expertise in innovation and production, enabling activities such as prototyping and scale-up.

The IAMP creates significant scope for large-scale production of new environmental technologies that are being developed in the area. The IAMP is being brought forward by Sunderland City Council and South Tyneside Council, with developer Henry Boot.

On 1 July 2021 Envision AESC announced that they will be building their second gigaplant on IAMP with 9GWh of production capability which will create 700 jobs and safeguard a further 300 jobs. This was part of a wider announcement by Nissan regarding the creation of Nissan 36Zero in Sunderland. This inward investment announcement which will increase the city and region's green economy and support decarbonisation of transport followed significant co-operation between the local authority

and both Nissan and Envision AESC as well as central government. Work has now commenced on site on the new gigaplant.

In addition, Saietta Electric Drives announced their decision to invest in Sunderland in March / April 2022 following close collaboration with the City Council as well as engagement with the North East Automotive Alliance (of which Sunderland City Council is a member) and its EV North group. From their new facility they will manufacture electric motors and drives to support decarbonisation of transport (automotive, marine etc).

Other entities collaborated with

National government
Academia
Energy

Primary entity collaborated with

Civil society
Academia

Mechanisms used to collaborate

Collaborative initiative
Capacity development
Project delivery - Public Private Partnership

Areas collaboration focused on

Building and Infrastructure

Description of collaboration

Sunderland Council and College (Education Partnership North East) are working closely with industry to develop the Housing Innovation Construction Skills Academy (HICSA) at Riverside Sunderland which will provide education and training opportunities, linking to Research & Development to ensure the skills of the region meet the future needs of industry linked to modern methods of construction (MMC). The partnership includes close cooperation with Sunderland-born architect George Clarke's Ministry of Building Innovation and Education (MOBIE).

This will support the goal of Sunderland becoming carbon neutral as a city by 2040, also training local people to deliver decarbonisation programmes for the city's existing homes and neighbourhoods that will improve energy efficiency, reduce carbon footprint and keep residents warm in winter months, and that will lead the way with training MMC.

Other entities collaborated with

Industrials

Primary entity collaborated with

Business
Utilities

Mechanisms used to collaborate

Knowledge or data sharing
Reporting of climate and/or environmental data

Areas collaboration focused on

Water

Description of collaboration

With relation to water, and in particular flood risk management, Sunderland City Council collaborate on engineering and consulting procurement, project implementation and management, funding (grants), as well as policy and regulation consultation. For example:

- Sunderland City Council work with Northumbrian Water as part of the Northumbrian Integrated Drainage Partnership (NIDP) to identify key improvements and schemes.
- Northumbrian Regional Flood and Coastal Committee (RFCC) includes the Environment Agency and 7 North Eastern Local Authorities.
- Sunderland City Council forms part of the Association of Sustainable Drainage Authorities

Other entities collaborated with

Regional government
Neighboring local government
Local government within country

Primary entity collaborated with

Government
National government

Mechanisms used to collaborate

Collaborative initiative
City business partnership platform
Knowledge or data sharing
Capacity development
Multi-jurisdictional regional collaboratives
Reporting of climate and/or environmental data
Funding (grants)
Technical assistance
Project implementation and management
Project delivery - Public Private Partnership
Climate action plan implementation
Nationally Determined Contribution (NDC) development/ implementation

Requirement to develop and implement emissions reduction target

Areas collaboration focused on

Emissions reduction
Adaptation
Resilience
Energy
Transport (Mobility)
Waste
Building and Infrastructure
Industry
Agriculture
Forestry
Landscape and jurisdictional approaches
Food
Water
Education


Description of collaboration

Sunderland City Council recently reaffirmed its commitments to UK100, by signing their new Net Zero pledge. Signatories of this pledge are known as the 'Net Zero Local Leadership Club' and are working collaboratively to ensure net-zero targets are reached as soon as possible.

UK100 brings together ambitious local authorities to share knowledge, collaborate, and petition the central UK government with their collective power (101 Councils have already signed up to the revised pledge). UK100 works closely with elected representatives and policy experts to develop solutions to the challenges local leaders face and build public support for the net-zero transition.

Through reaffirming commitments to UK100, this reflects increased ambition by the Council and city, through increasing our targets.

In June 2022 the Council's Deputy Leader (and portfolio holder for Low Carbon) successfully applied to UK100's Climate Leadership Academy for councilors. The Academy, which will take place between September – November 2022, offers ambitious councilors in a leadership position a unique coaching opportunity to develop their political skills, knowledge and confidence, in order to become leading climate pioneers in local government. Participants will leave the programme able to overcome the challenges in designing and delivering ambitious, local climate projects, to enable remarkable progress towards their organisation's Net Zero goals.

 Sunderland UK100 Pledge Signed.pdf

Other entities collaborated with

Local government within country
Academia

Climate initiatives
Communication Services
Consumer Discretionary
Consumer Staples
Energy
Financials
Health care
Industrials
Information Technology
Materials
Real Estate
Utilities

Primary entity collaborated with

Civil society
NGO and associations

Mechanisms used to collaborate

Collaborative initiative
Knowledge or data sharing
Reporting of climate and/or environmental data
Climate action plan implementation

Areas collaboration focused on

Emissions reduction
Adaptation
Resilience
Energy
Transport (Mobility)
Waste
Building and Infrastructure
Industry
Agriculture
Forestry
Landscape and jurisdictional approaches
Ecosystem restoration
Food
Water
Public health
Natural environment
Social Services
Education

Description of collaboration

As a national finalist in the WWF One Planet City Challenge 2021, Sunderland was recently invited to participate in the 'We Love Cities' campaign in September-October

2022.

'We Love Cities' is a public engagement campaign that allows people across the world to express support for sustainable urban development by voting for their favorite finalist from WWF's One Planet City Challenge and posting improvement suggestions for these cities.

The central aim of the campaign is to:

- inspire and raise awareness for the sustainability progress being made in cities;
- give the general public an opportunity to celebrate, vote and upgrade their city through making suggestions to decision makers;
- reward communities and strengthen the bond between the public and decision makers.

Sunderland is developing a communications plan for how this will be widely shared in a range of formats and what other activities can sit alongside this (such as school poster competitions with finalists displayed around the city). The city would like not only to garner votes but to use the opportunity to receive feedback on successes to date and areas for improvement. Sunderland is working with diverse partners to ensure maximum engagement with the campaign, including the Environmental, Green Sustainable (EGS) youth forum representing young people from primary to university ages and from all areas of the city who discussed it at their June 2022 meeting and will share with their nominating schools, college, University and youth groups. The campaign has also been presented at the citywide 2030 Shadow Board where partners from all sectors committed to supporting its rollout

Other entities collaborated with

Residents

Primary entity collaborated with

Government

National government

Mechanisms used to collaborate

Collaborative initiative

City business partnership platform

Knowledge or data sharing

Capacity development

Convening industry groups

Technical assistance

Engineering and consulting procurement

Policy and regulation development/ implementation

Climate action plan implementation

Nationally Determined Contribution (NDC) development/ implementation

Development of local/regional adaptation plans, National Adaptation Plans and/or

National Adaptation Programmes of Action (NAPAs)

Areas collaboration focused on

- Emissions reduction
- Adaptation
- Resilience
- Energy
- Building and Infrastructure

Description of collaboration

In autumn 2021 the Department for Business, Energy and Industrial Strategy (BEIS) consulted on proposals for the implementation of heat network zones in the UK. The overall aim of this is to develop heat networks in zones where they can provide the lowest cost low carbon heat to the end-consumer in England through regulation, mandating powers, and market support.

Sunderland are one of 28 pilot cities assisting BEIS with their methodology for heat network zoning – working with major and large energy users among the city’s business community and public sector.

Other entities collaborated with

- National government
- Regional government
- Neighboring local government
- Local government within country
- Academia
- Climate initiatives
- Residents
- Communication Services
- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Health care
- Industrials
- Information Technology
- Materials
- Real Estate
- Utilities

Primary entity collaborated with

- Civil society
- Education sector

Mechanisms used to collaborate

- Collaborative initiative
- Capacity development

Funding (grants)
Project implementation and management

Areas collaboration focused on

Emissions reduction
Adaptation
Resilience
Energy
Transport (Mobility)
Waste
Building and Infrastructure
Industry
Agriculture
Forestry
Ecosystem restoration
Food
Water
Natural environment
Education

Description of collaboration

Sunderland City Council look to signpost schools to grant opportunities such as COP 26 School Grants which saw 6 secondary schools and 2 primary schools design and deliver a range of carbon-cutting initiatives, from planting trees to creating orchards, reducing single-use plastics and harvesting willow.

Other entities collaborated with

Primary entity collaborated with

Civil society
Residents

Mechanisms used to collaborate

City business partnership platform
Knowledge or data sharing
Reporting of climate and/or environmental data
Climate action plan implementation

Areas collaboration focused on

Emissions reduction
Adaptation
Resilience
Energy
Transport (Mobility)
Waste
Building and Infrastructure

Industry
Forestry
Landscape and jurisdictional approaches
Ecosystem restoration
Food
Water
Public health
Natural environment
Social Services
Education

Description of collaboration

In 2021, Sunderland created the new My Sunderland website, which is a citywide platform to allow partners to publish their data in one place. (<https://www.mysunderland.co.uk/LowCarbon>). The new website is interactive and provides regular reporting (including quarterly emissions reports, annual data reports, the city's annual CDP submission and the biannual One Planet City Challenge Strategic Feedback Report), case studies, partners involved, information on how to help, information regarding the science of climate change and an events calendar to support awareness raising and engagement activity.

Other entities collaborated with

Primary entity collaborated with

Civil society
Residents

Mechanisms used to collaborate

Collaborative initiative
City business partnership platform
Knowledge or data sharing
Reporting of climate and/or environmental data
Project implementation and management
Project delivery - Public Private Partnership

Areas collaboration focused on

Emissions reduction
Transport (Mobility)

Description of collaboration

Sunderland City Council has teamed up with Better Points, an app that tracks travel movements via GPS using smartphones and rewards participants with points for using more sustainable modes of transport like walking, cycling and using public transport as a pilot project.

In addition, Sunderland City Council is collaborating with Nebula Labs and the UK

Digital Catapult under its Internet of Things for Local Authorities programme to develop a proof of concept app to automate travel surveys, by tracking journeys and automatically working out the mode of transport taken by employees. So far during the pilot, the app has gathered 700 data points and identified journeys correctly to between 80% and 96% accuracy.

As part of the UK Digital Catapult's Internet of Things for Local Authorities programme, Sunderland City Council is also collaborating with Nomad Energy Solutions Ltd to develop and pilot a digital product which can improve energy efficiency within Council buildings. The proposal began with two test sites at the Council's Evolve and Leechmere buildings and provided short-, medium- and long-term suggestions in the form of a report, and both buildings are experiencing reductions in carbon emissions. The Council is now working with Nomad Energy Solutions Ltd to form a wider decarbonisation plan for the rest of the operational estate.

Other entities collaborated with

Academia
Climate initiatives
Information Technology
Other, please specify
Transport

Primary entity collaborated with

Civil society
NGO and associations

Mechanisms used to collaborate

Collaborative initiative
Project implementation and management
Project delivery - Public Private Partnership

Areas collaboration focused on

Emissions reduction
Transport (Mobility)
Building and Infrastructure

Description of collaboration

The Local Climate Engagement project, supported by DemSoc will focus on public engagement around travel behaviours. The project will focus on two areas; working with Together for Children to reduce carbon emissions from transport to schools for SEND children as well as increasing public engagement for individual projects in the Local Cycling and Walking Infrastructure Plan (LCWIP). This will run until March 2023.

Other entities collaborated with

Education sector

Primary entity collaborated with

Government
National government

Mechanisms used to collaborate

Collaborative initiative
Funding (grants)
Project implementation and management
Project delivery - Public Private Partnership

Areas collaboration focused on

Emissions reduction
Energy
Transport (Mobility)
Building and Infrastructure

Description of collaboration

Sunderland City Council work collaboratively with partners to secure funding to deliver projects which reduce carbon emissions within domestic properties in the city. Examples of this include the Warm Homes Fund. Warm Homes Fund Lot 1 aims to fit 135 all-electric air source heat pumps in low efficiency / low-income properties that currently have old inefficient electric storage heaters. As part of the process a whole-house, fabric-first approach is adopted meaning Warm Homes Fund qualifying properties will be suitably insulated from other funding streams (e.g., ECO4) to enable installation of the heat pump. Lot 2 of the Warm Homes Fund aims to deliver complementary energy efficiency advice and support targeting these properties, bringing together local organisations (Groundwork North East and Citizens Advice Bureau as community partners) to provide energy efficiency advice, debt advice and information on health related programmes. Partners include Sunderland City Council, Groundwork UK and the Citizen's Advice Bureau. Another example is the Social Housing Decarbonisation Fund Wave 1 Project, which will deliver energy efficiency improvements (including loft insulation and double glazing) in 604 social homes. This includes a collaboration between Sunderland City Council and Gentoo, which is Sunderland's main housing provider.

Other entities collaborated with

National government
NGO and associations
Energy
Real Estate

Primary entity collaborated with

Civil society
Other, please specify
Green Champions

Mechanisms used to collaborate

- Knowledge or data sharing
- Capacity development
- Project implementation and management

Areas collaboration focused on

- Emissions reduction
- Adaptation
- Resilience
- Energy
- Transport (Mobility)
- Waste
- Building and Infrastructure
- Industry
- Agriculture
- Forestry
- Landscape and jurisdictional approaches
- Ecosystem restoration
- Food
- Water
- Public health
- Natural environment
- Social Services
- Education

Description of collaboration

In 2021-22 Sunderland City Council has prepared for the launch of a new Green Champions employee network. Early activities have included recruitment of interested volunteers at three staff events, where the Council's and city's Low Carbon ambitions, framework and plans have been shared as well as information on specific Low Carbon topics (Active and sustainable transport in May and July and Reducing Consumption and Waste with links to Refill Sunderland and Plastic free month in July). Other staff were also recruited through participation in the Sunderland 60 Common Purpose Legacy project, where young Council employees were invited to become Green Champions for their work areas. Regular information is now featured on the intranet, staff social media channels and platforms and in newsletters and Teams messaging. Plans are being developed for the founding of a network for the champions, including the information they will receive and the mechanisms for how they can provide feedback from their directorates back to the Low Carbon team.

Other entities collaborated with

Primary entity collaborated with

- Civil society
- NGO and associations

Mechanisms used to collaborate

- Collaborative initiative
- Knowledge or data sharing
- Capacity development
- Project implementation and management
- Climate action plan implementation

Areas collaboration focused on

- Emissions reduction
- Transport (Mobility)
- Public health
- Education

Description of collaboration

Sunderland City Council submitted a successful bid in January 2022 and was shortlisted for participation in the Local Climate Engagement (LCE) project. The programme is a partnership between Involve, UK100, Democratic Society, Shared Future and Climate Outreach and works with local authorities to deliver public engagement projects on climate policy, recognising the significant leadership Councils are showing by setting Net Zero targets that are years ahead of national legislation, as well as local authorities' potential for wider impact in their cities.

Following this, a group of officers from the Low Carbon team, Neighbourhoods, Transport services and Together for Children undertook a successful interview in February and Sunderland, as one of 5 authorities to be offered in-depth project support, was matched to international citizen democracy NPO, Demsoc to take the project forward.

Sunderland's project is focusing on public engagement around travel behaviours, including featured areas: working with Together for Children to reduce carbon emissions from home to school transport for SEND children and young people and increasing public engagement for travel behaviour as we deliver the Local Cycling and Walking Infrastructure Plan (LCWIP).

The planning meetings took place in spring-summer 2022 and 6 training sessions will be delivered to 20 Sunderland colleagues from the autumn.

Other entities collaborated with

- Residents
- Education sector
- Other, please specify
 - Public Health

Primary entity collaborated with

- Civil society

Climate initiatives

Mechanisms used to collaborate

- Collaborative initiative
- Knowledge or data sharing
- Multi-jurisdictional regional collaboratives
- Funding (grants)
- Project implementation and management
- Climate action plan implementation

Areas collaboration focused on

- Emissions reduction
- Adaptation
- Transport (Mobility)
- Building and Infrastructure
- Industry
- Forestry
- Landscape and jurisdictional approaches
- Ecosystem restoration
- Natural environment
- Education

Description of collaboration

Having signed the European Covenant of Mayors in 2009. Sunderland was happy to be selected to participate in the programme's peer learning project which brings cities together to exchange good practice on climate and energy actions and to build long-term relationships. Sunderland was one of 11 cities (and one of 5 'expert' cities) from over 100 applications to be selected take part in the project, facilitated by EUROCITIES. In October 2021 Sunderland hosted an online 4-day event with Vitoria Gastéiz from Spain and Parma in Italy to share learning and expertise. Topics discussed included transport, energy and green infrastructure, and Sunderland led discussions on community and partner engagement, highlighting the city-wide approach to the Low Carbon framework and Carbon neutrality ambitions. Sunderland colleagues and elected representatives, including the Leader of the Council, gave a number of presentations over the 4 days as well as taking part in joint sessions, with a particular focus on resident engagement and stakeholder collaboration. The 'visit' culminated in our European partners participating alongside young people's (EGS) representatives in October's city-wide 2030 Low Carbon Shadow Board's meeting.

Other entities collaborated with

- Local government outside of country
- Climate initiatives
- NGO and associations

Primary entity collaborated with

- Government
- Local government outside of country

Mechanisms used to collaborate

- Collaborative initiative
- Multi-jurisdictional regional collaboratives
- Funding (grants)

Areas collaboration focused on

- Emissions reduction
- Adaptation
- Resilience
- Energy
- Transport (Mobility)
- Waste
- Building and Infrastructure
- Industry
- Forestry
- Landscape and jurisdictional approaches
- Ecosystem restoration
- Food
- Water
- Natural environment
- Education

Description of collaboration

Sunderland City Council has (in partnership with German twin town Essen) secured funding from North Rhine Westphalia and Stadt Essen and provided match funding to deliver the Citizens' Low Carbon Innovation for Mutual Action in Twin CitiEs (CLIMATE) project. This brought together groups of young people from Sunderland College (students in Travel and Tourism as well as Green Ambassadors) to work with counterparts in Theodore Heuss Gymnasium. Initial work was delivered virtually, including joint online sessions of both groups of learners, a webinar and joint project work. The project culminated (June 2022) in a visit of the Sunderland group, travelling sustainably overland to reach Germany, where they then spent time working with the Essen group of young people. Their visit included meeting with the European Green Capital Agency, a reception at the Town Hall of Essen, visiting the THG school, exploring local sustainable sites in Essen including an energy exhibition, and joint student-led projects.

Other entities collaborated with

- Local government outside of country
- Academia
- NGO and associations
- Education sector

Primary entity collaborated with

- Civil society
- NGO and associations

Mechanisms used to collaborate

- Knowledge or data sharing
- Capacity development
- Labour market training initiatives

Areas collaboration focused on

- Emissions reduction
- Energy
- Transport (Mobility)
- Waste
- Building and Infrastructure
- Forestry
- Natural environment
- Education

Description of collaboration

The Sunderland 60 Legacy programme was delivered in June 2022 by Common Purpose, a non-profit organisation which delivers leadership programmes in over 200 cities globally. It brought together 18-25 year olds Sunderland Legacy will bring together 18-25 year olds from a range of employers and education providers across the city as part of an international leadership programme to work on how to make Sunderland a cleaner, greener city for generations to come.

Young people were invited to participate from organisations including Together For Children, Sunderland Care & Support, Gentoo, Sunderland College, the University of Sunderland, Sunderland City Council, many of whom sponsored the programme, alongside businesses Arctic Wolf and Ashmore Consultants.

Over four days the participants received training and sessions from Common Purpose as well as experts in related fields locally. They were then given the opportunity to present their own ideas to senior officials on how they would recommend reducing carbon footprints and helping the city achieve its low carbon ambitions – these resulted in 6 strong proposals for Sunderland.

Two of the young people attended the city's next 2030 Shadow Board to share their experience and the proposed ideas they had developed and the next meeting of the cohort is planned for September 2022.

Other entities collaborated with

- Academia
- Climate initiatives
- Vulnerable population groups
- NGO and associations
- Education sector
- Health care
- Real Estate

Assessment

1. Climate Risk and Vulnerability

(1.1) Has a climate risk and vulnerability assessment been undertaken for your jurisdiction? If not, please indicate why.

Yes, a climate risk and vulnerability assessment has been undertaken

(1.1a) Provide details on your climate risk and vulnerability assessment.

Assessment attachment and/or direct link^

https://sunderland.gov.uk/media/22850/AD-25-Strategic-Flood-Risk-Assessment-Level-1/pdf/AD.25_Strategic_Flood_Risk_Assessment_Level_1.pdf?m=637431304023570000

 AD.25_Strategic_Flood_Risk_Assessment_Level_1 (1).pdf

Confirm attachment/link provided to assessment

The assessment has been attached and can be accessed (unrestricted) on the link provided

Boundary of assessment relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year of publication or approval^

2020

Factors considered in assessment

Assessment considers vulnerable populations
Assessment considers water security
Assessment considers nature
Assessment considers transition risks
Assessment includes a high-emissions scenario
Identified hazards have been incorporated into the jurisdictions overall risk management framework
A process has been established for prioritizing identified hazards
A process has been established to update the assessment at least every five years

Primary author(s) of assessment^

Consultant

Please explain

This Level 1 Strategic Flood Risk Assessment (SFRA) uses up-to-date flood risk information together with the most current flood risk and planning policy available from the National Planning Policy Framework and Flood Risk and Coastal Change Practice Planning Guidance.

The Level 1 SFRA focusses on collecting readily available flood risk information from

stakeholders, the aim being to help identify the number and spatial distribution of flood risk sources present throughout the area to inform the application of the Sequential Test.

Sunderland City Council (SCC) require this Level 1 SFRA to initiate the sequential risk-based approach to the allocation of land for development. This will help to inform and provide the evidence base for the Local Planning Authority's (LPA) Allocations & Designations Plan (A&D Plan).

Assessment attachment and/or direct link^

<https://www.gateshead.gov.uk/media/2879/Northumbria-community-risk-register-booklet/pdf/Northumbria-Community-Risk-Register-version-6.pdf?m=636409117667530000>

 Northumbria_Community-Risk-Register-2021-2022.pdf

Confirm attachment/link provided to assessment

The assessment has been attached and can be accessed (unrestricted) on the link provided

Boundary of assessment relative to jurisdiction boundary^

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
The Northumbria Community Risk Register covers Sunderland as well as Northumberland, Newcastle, Gateshead, Durham, South Tyneside and North Tyneside

Year of publication or approval^

2021

Factors considered in assessment

Assessment considers vulnerable populations

Assessment considers nature

Identified hazards have been incorporated into the jurisdictions overall risk management framework

Primary author(s) of assessment^

Regional/ state/ provincial government

Please explain

The Northumbria Risk Register is prepared by the Northumbria Local Resilience Forum and provides risk information on emergencies that could happen within the Northumbria area, together with an assessment of how likely they are to happen and the impacts if they do.

The Risk Register identifies:

1. Emergency Management Steps
2. Northumbria's Top Risks

3. What you can do to be prepared in an emergency
4. How your local community can be prepared
5. Business Continuity Management
6. Further Information

Assessment attachment and/or direct link^

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1047003/climate-change-risk-assessment-2022.pdf

 climate-change-risk-assessment-2022.pdf

Confirm attachment/link provided to assessment

The assessment has been attached and can be accessed (unrestricted) on the link provided

Boundary of assessment relative to jurisdiction boundary^

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
The UK Climate Change Risk Assessment covers the entire UK.

Year of publication or approval^

2022

Factors considered in assessment

Assessment considers vulnerable populations
Assessment considers water security
Assessment considers nature
Assessment considers transition risks
Assessment includes a high-emissions scenario
Identified hazards have been incorporated into the jurisdictions overall risk management framework
A process has been established for prioritizing identified hazards
A process has been established to update the assessment at least every five years

Primary author(s) of assessment^

Consultant

Please explain

The Climate Change Act requires the UK Government to compile every five years its assessments of the risks and opportunities arising from the UK from climate change.

This report aims to assess the urgency of further action to tackle current and future risks, and realise opportunities, arising for the UK from climate change.

Assessment attachment and/or direct link^

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj1sILD2oXyAhWMgVwKHQ7LB44QFjABegQIERAD&url=https%3A%2F%2Fwww.hartlepool.gov.uk%2Fdownload%2Fdownloads%2Fid%2F3015%2Fhlp05_4_a_summary_of_climate_change_risks_for_north_east_england_2012pdf.pdf&usg=AOvVaw3sJ2t-WYuAUcGLa6On20dp

 A Summary of Climate Change Risks for North East England.pdf

Confirm attachment/link provided to assessment

The assessment has been attached and can be accessed (unrestricted) on the link provided

Boundary of assessment relative to jurisdiction boundary^

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
This report covers the whole of North East England - including Northumberland, Tyne and Wear, County Durham and the Tees Valley.

Year of publication or approval^

2012

Factors considered in assessment

Assessment considers vulnerable populations
Assessment considers water security
Assessment considers nature
Assessment includes a high-emissions scenario
Identified hazards have been incorporated into the jurisdictions overall risk management framework

Primary author(s) of assessment^

Consultant

Please explain

The UK Climate Change Risk Assessment (CCRA) is an independent research project, funded by UK Government and Devolved Governments that analyses the main risks and opportunities to the UK, arising from climate change over the coming years. It provides the underpinning evidence to inform discussions on adaptation actions needed in such areas as infrastructure, health, environment and business.

This report coincides with the UK CCRA, applying its context to the North East of England, to provide an understanding of the key threats and opportunities associated with climate change in the North East England region.

Assessment attachment and/or direct link^

Web link not available

 North East Climate Change Adaptation Study 2008 (1).pdf

Confirm attachment/link provided to assessment

The assessment has been attached

Boundary of assessment relative to jurisdiction boundary^

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
Covers the whole North East England region.

Year of publication or approval^

2008

Factors considered in assessment

Assessment considers vulnerable populations

Primary author(s) of assessment^

Consultant

Please explain

The North East England Climate Change Adaptation Study 2008:

- Projects climate changes across the region to the 2050s using state-of-the-art modelling techniques
- Assesses the impacts of the projected climate changes on current services, assets, communities, business and infrastructure.
- Identifies what needs to be done to adapt the impacts
- Identifies which organisations are best placed to take the lead in taking forward the identified adaptation actions.

(1.2) Provide details on the most significant climate hazards faced by your jurisdiction.

Climate-related hazards^

Extreme cold

Vulnerable population groups most exposed

Children and youth
Elderly
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Water supply
Waste management
Conservation
Transportation and storage
Accommodation and food service activities
Education

Human health and social work activities

Describe the impacts on vulnerable populations and sectors^

Health risks include high blood pressure, colds, heart attacks, pneumonia and mental health impacts. This can cause absence from work, social isolation and sleep deprivation. Those with existing health conditions are especially vulnerable to the cold, including people with circulatory problems, diabetes, arthritis, asthma, depression and anxiety. People with certain disabilities, children and the elderly also fall into higher risk categories. Low-income households are more at risk from fuel poverty and more likely to live in poorly insulated housing, which can lead to increased cold related illnesses. The current cost of living crisis will also increase the number of people falling into fuel poverty and therefore vulnerable. Cold weather may prevent people leaving home, exacerbating social isolation and loneliness. Due to the impact on health, cold waves will increase pressure on healthcare.

Outdoor workers exposed to extreme cold can suffer from illness, as well as a potential loss of income if conditions are deemed too cold to work.

Cold weather disrupts transport and infrastructure. This will impact council work such as waste collection and winter gritting as well as mobility, including travelling to work and school.

Extreme cold lowers crop yields due to frost restricting stem growth. Water sources for agriculture will also decrease due to freezing water. Livestock can suffer from injury or premature death. Damaged infrastructure will also lower agricultural productivity, increasing costs.

Wildlife may struggle to adapt quick enough to the changing conditions, resulting in biodiversity loss. Impacts will be felt throughout food chains, damaging ecosystems. Migration patterns will change as animals seek warmer temperatures.

In 2018 Anticyclone Hartmut brought widespread cold temperatures and heavy snowfall to large areas of the UK, including Sunderland. There were 17 UK deaths due to the mixed effects of Anticyclone Hartmut and Storm Emma. Many schools in Sunderland were closed temporarily. Anticyclone Hartmut, and subsequent weather events, also significantly damaged Sunderland's coastline, including at the Old North Pier (£1.25m), Stonehill Wall (£1.5m) and New South Pier (£350k).

The frequency of cold waves is likely to increase in the future, increasing health risks for vulnerable Sunderland residents and the economy

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

Medium

Current magnitude of impact of hazard^

Medium

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Extreme heat

Vulnerable population groups most exposed

Children and youth

Elderly

Low-income households

Outdoor workers

Frontline workers

Sectors most exposed^

Agriculture

Electricity, gas, steam and air conditioning supply

Water supply

Describe the impacts on vulnerable populations and sectors^

The Northumbria LRF Community Risk Register lists Adverse Weather, including heat waves and consequent failure of essential services as top risk. The frequency of such events is likely to increase in the future, increasing the health risks for people in Sunderland, particularly the vulnerable populations in the city, as well as the risk to the economy.

Extreme heat events can be dangerous to health – even fatal. These events result in increased hospital admissions for heat-related illness, as well as cardiovascular and respiratory disorders. Extreme heat events can trigger a variety of heat stress conditions, such as heat stroke. Heat stroke is the most serious heat-related disorder. It occurs when the body becomes unable to control its temperature. Body temperature rises rapidly, the sweating mechanism fails, and the body cannot cool down. This condition can cause death or permanent disability if emergency treatment is not given. Small children, the elderly, and certain other groups including people with chronic diseases, low-income populations, and outdoor workers have higher risk for heat-related illness. Higher temperatures and respiratory problems are also linked. One reason is because higher temperatures contribute to the build-up of harmful air pollutants.

Extreme heat affects crop growth. High air temperature reduces the growth of shoots, resulting in lower crop yields. Higher temperatures also reduce yields of desirable crops, and increase growth of weeds and pests. Heat can also increase the risk of drought.

Electricity usage will increase with greater use of air conditioning, which could potentially lead to shortages and price increases.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

No

Current probability of hazard^

Low

Current magnitude of impact of hazard^

Low

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

River flooding

Vulnerable population groups most exposed

Elderly
Vulnerable health groups
Low-income households

Sectors most exposed^

Agriculture
Forestry
Transportation and storage
Financial and insurance activities
Real estate activities

Describe the impacts on vulnerable populations and sectors^

The elderly and vulnerable health groups are more likely to be less mobile, therefore are likely to be less able to reach a safe location, in the event of a flood.
Low-income households are more likely to live in high-risk flood areas, as housing is

cheaper. As river flooding increases, the houses at risk will decrease in value, and be more difficult to sell. As a result, families in low-income households may not have the option to move to safer housing. In addition to this, Insurance premiums on high-risk housing will also be more expensive, or not offered by some insurance companies, leading to increased expenditure or no insurance cover at all. Currently, there are 15 properties (approx. 32 people) at risk of river flooding in the Fatfield area in Washington.

Flooding may cause direct damage to trees and vegetation by changing soil conditions, sedimentation and physical damage, as well as weakening trees, making them more susceptible to damage from insects and diseases.

The transport sector will suffer disruption as roads become impassable. Flooding can cause damage to communication infrastructure, which can leave people isolated, especially vulnerable people.

River flooding is extremely costly to agricultural land as it causes delays and reductions in crop harvest. Flooded agricultural land is unsuitable for planting. River water will also contaminate crops making them unsuitable for human consumption, as well as increasing runoff and soil depletion. Rapid river flooding can cut off access to livestock and mean they can't get to safe areas or food. Livestock can experience stress in the event of a flood meaning cows and ewes are more likely to give birth early. Stress and poor access to feed will increase the risk of metabolic diseases such as grass tetany, milk fever and ketosis, as well as an increased risk of parasites. Livestock that have been standing in deep flood water for prolonged periods in cold conditions may also be at risk of hypothermia. Insurance premiums for farmers will also increase in areas at high risk.

Proportion of the population exposed to the hazard

<10%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

Medium

Current magnitude of impact of hazard^

Low

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Coastal flooding

Vulnerable population groups most exposed

Elderly
Vulnerable health groups
Low-income households

Sectors most exposed^

Agriculture
Forestry
Transportation and storage
Financial and insurance activities
Real estate activities
Other, please specify
Port of Sunderland

Describe the impacts on vulnerable populations and sectors^

The elderly and vulnerable health groups are more likely to be less mobile, therefore are likely to be less able to reach a safe location, in the event of a flood.

Low-income households are more likely to live in high-risk flood areas, as housing is cheaper. As coastal flooding increases, the houses at risk will decrease in value, and be more difficult to sell. As a result, families in low-income households may not have the option to move to safer housing. In addition to this, insurance premiums on high-risk housing will also be more expensive, or not offered by some insurance companies, leading to increased expenditure or no insurance cover at all.

Flooding may cause direct damage to trees and vegetation by changing soil conditions, sedimentation and physical damage, as well as weakening trees, making them more susceptible to damage from insects and diseases.

The transport sector will suffer disruption as roads become impassable. Flooding can cause damage to communication infrastructure, which can leave people isolated, especially vulnerable people.

Currently there are 3 properties (approx. 6 people) at the coast at Marine Walk in Roker at risk of flooding.

The Port of Sunderland is at risk to coastal flooding which would cause a disruption to operations and potential damage to infrastructure, resulting in economic losses.

Proportion of the population exposed to the hazard

<10%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

Medium Low

Current magnitude of impact of hazard^

Medium Low

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Urban flooding

Vulnerable population groups most exposed

Elderly
Vulnerable health groups
Low-income households

Sectors most exposed^

Forestry
Sewerage, waste management and remediation activities
Conservation
Construction
Transportation and storage
Financial and insurance activities
Real estate activities
Education

Describe the impacts on vulnerable populations and sectors^

The elderly are more likely to be less mobile, therefore are likely to be less able to reach a safe location, in the event of a flood.

Low-income households are more likely to live in high-risk flood areas, as housing is cheaper. As urban flooding increases, the houses at risk will decrease in value, and be more difficult to sell. As a result, families in low-income households may not have the option to move to safer housing. In addition to this, insurance premiums on high-risk housing will also be more expensive, or not offered by some insurance companies, leading to increased expenditure or no insurance cover at all.

Flooding may cause direct damage to trees and vegetation by changing soil conditions, sedimentation and physical damage, as well as weakening trees, making them more susceptible to damage from insects and diseases. This will also hinder conservation efforts and become a greater concern as Sunderland increases its tree cover through NE Community Forest development.

The transport sector will suffer disruption as roads become impassable. Flooding can cause damage to communication infrastructure, which can leave people isolated, especially vulnerable people.

If sewers flood, they can overflow with raw sewerage causing health hazards and contamination.

Currently there are 2,816 properties (approx. 5,914 people) across Sunderland at risk of urban flooding.

Proportion of the population exposed to the hazard

<10%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

Medium Low

Current magnitude of impact of hazard^

Medium Low

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Short-term (by 2025)

Climate-related hazards^

Storm

Vulnerable population groups most exposed

Children and youth

Elderly

Marginalized/minority communities

Low-income households

Outdoor workers

Frontline workers

Sectors most exposed^

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Conservation
Construction
Transportation and storage
Information and communication
Financial and insurance activities
Education

Describe the impacts on vulnerable populations and sectors^

Storms disrupt and damage transport infrastructure and roads may become impassible, making it more difficult for travel to school and work and for Council and other services to be carried out. In the case of extreme storms, schools may close, causing disruption to education.

Damage to buildings, power networks and flooding caused by heavy precipitation results in people needing to find safer temporary accommodation. This particularly affects the elderly who may be more vulnerable when moving from their immediate networks and potentially becoming isolated. Marginalised, minority communities and low-income households typically live in poorer housing, which is more likely to be susceptible to storm damage. Furthermore, if the repair costs after a storm are unaffordable, housing may be unsafe.

During storms, outdoor workers will be unable to work due to safety concerns, potentially resulting in loss of income and are more likely to be injured from flying debris. Frontline workers will experience an increased number of emergencies from storm related incidents, increasing pressure on the healthcare system.

During storms, construction works cannot take place, potentially resulting in a loss of business revenue or staff income. During storm Arwen, 28 properties in Sunderland were structurally damaged and housing group Gentoo also faced costs of up to £2 million to repair damage. Insurance payouts significantly increased, in turn, increasing insurance premiums. Storms also cause damage to communication infrastructure, which can leave people isolated, especially vulnerable people.

Forestry is impacted by storms with greater damage to trees and increased soil erosion. In November 2021, Storm Arwen had a negative impact on conservation, as many of the trees damaged were saplings planted to increase biodiversity.

Storms negatively impact the agricultural sector through soil erosion, which can seriously affect farming productivity. Degraded land is less able to retain water and increases the risk of flooding when heavy rainfall occurs due to greater surface run-off. Livestock may also become injured, and experience increased stress.

Storm can also damage power supply. Damage to electricity infrastructure from Storm Arwen resulted in 240,000 UK residents left without power, many of which had to wait weeks to be reconnected.

Proportion of the population exposed to the hazard

<10%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

Medium High

Current magnitude of impact of hazard^

Medium

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Extreme wind

Vulnerable population groups most exposed

Children and youth
Elderly
Low-income households
Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Conservation
Construction
Transportation and storage
Information and communication
Financial and insurance activities

Describe the impacts on vulnerable populations and sectors^

Children, young people and the elderly are more at risk from injury from strong winds. Low-income households are more likely to live in less well-maintained accommodation, making them at higher risk of injury. Increased costs from housing repairs may also be unaffordable, resulting in unsafe accommodation. Strong winds make it unsafe for outdoor workers, making them more at risk to injury from flying debris. Frontline workers will experience an increased number of emergencies from injuries, increasing pressure on the healthcare system.

Strong winds cause damage to electricity infrastructure, leaving people without power. During strong winds, construction works are not able to take place, resulting in a loss of revenue. Furthermore, damage to buildings can increase pressure on the construction sector with an influx of demand. Insurance payouts significantly increase as a result of greater number of claims will, in turn, increase insurance premiums.

The transport sector will suffer disruption as roads become impassable with fallen trees and debris. Strong winds cause damage to communication infrastructure, which can leave people isolated, especially vulnerable people.

Strong winds damage crops, resulting in lower crop yields, and will increase stress in livestock, resulting in lower productivity. Forestry and conservation areas are impacted by strong winds with damage and uprooting of trees. During Storm Arwen in November 2021, winds reached nearly 100mph, damaging a number of trees in Sunderland.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard[^]

Medium Low

Current magnitude of impact of hazard[^]

Medium Low

Expected future change in hazard intensity[^]

Increasing

Expected future change in hazard frequency[^]

Increasing

Timeframe of expected future changes[^]

Short-term (by 2025)

Climate-related hazards[^]

Heavy precipitation

Vulnerable population groups most exposed

Outdoor workers

Sectors most exposed^

Agriculture
Forestry
Conservation
Construction
Transportation and storage

Describe the impacts on vulnerable populations and sectors^

Heavy precipitation often means outdoor workers are unable to work, potentially resulting in a loss of income.

Forestry and conservation areas are impacted as soil saturation and increased run off impacts the stability of vegetation. Construction can be disrupted causing delays to projects and an economic loss. Transport networks become unsafe due to flooded roads and rail networks, as well as poor visibility and slippery conditions.

Heavy precipitation negatively impacts the agricultural sector through soil erosion and saturation, which can seriously affect farming productivity. Degraded land is less able to retain water and increases the risk of flooding when heavy rainfall occurs due to greater surface run-off. Livestock may also become injured and stressed.

Proportion of the population exposed to the hazard

<10%

Did this hazard significantly impact your jurisdiction before this reporting year?

No

Current probability of hazard^

Low

Current magnitude of impact of hazard^

Low

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Short-term (by 2025)

Climate-related hazards^

Biodiversity loss

Vulnerable population groups most exposed

Other, please specify

All - continued biodiversity loss = ecosystem collapse

Sectors most exposed^

Agriculture

Forestry

Fishing

Water supply

Conservation

Other, please specify

public health; food supply

Describe the impacts on vulnerable populations and sectors^

Biodiversity loss threatens food production and agricultural resilience to shocks and stresses that can lead to crop failure. Loss of biodiversity means that crops are more vulnerable to pests and diseases.

Biodiversity loss hinders forest ecosystem functioning and the provision of ecosystem services.

The loss of marine biodiversity is weakening the ocean ecosystem and its ability to withstand stresses, to adapt to climate change and to play its role as a global ecological and climate regulator. As a result, fish stocks are depleted and a smaller variety of fish can be fished. This impacts the profitability of fishing, as well as fish available for consumption.

Conservation efforts become more challenging as biodiversity loss reduces an ecosystem's productivity and lowers the quality of the ecosystem's services, including; maintaining the soil, purifying water and supplying food and shade. This will result in a further loss of biodiversity.

Biodiversity Net Gain is being brought in as part of the Environment Act and there will be mandatory net gain of 10% minimum on all new developments from next year. The Council is working with neighbouring local authorities to prepare a Biodiversity Supplementary Planning Document and a Local Nature Recovery Strategy to guide how biodiversity net gain will be delivered within Sunderland.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Do not know

Current probability of hazard^

High

Current magnitude of impact of hazard^

High

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

GCoM Common Reporting Framework Reporting Requirements for European Cities

(1.3) Identify and describe the most significant factors impacting on your jurisdiction’s ability to adapt to climate change and indicate how those factors either support or challenge this ability.

Factors that affect ability to adapt^	Degree to which this factor challenges/supports the adaptive capacity of your jurisdiction^	Describe how the factor supports or challenges the adaptive capacity of your jurisdiction^
Access to basic services	Supports Moderately supports	Overall, Sunderland has adequate access to basic services. This includes good shelter, health and care, infrastructure, transport, power and water supply. Gentoo (Sunderland’s largest housing provider), health and care services, Council infrastructure and transport teams, businesses, the national grid, and Northumbrian Water are already planning to mitigate and adapt to climate change within the city.
Access to education	Supports Significantly supports	There are numerous opportunities to include climate change within the curriculum and in extra-curriculum activities at primary and secondary levels. For primary education, Sunderland currently has 83 primary schools (including maintained schools, academies and faith schools) catering for ~24,000 children aged 4-11. For secondary education, Sunderland has 3 Voluntary Aided Roman Catholic Secondary Schools, 1 Voluntary Aided Church of England Academy, 14 other Academies and 2 Free Schools, together serving ~15,500 pupils. There are 3 Primary Special Schools and 3 Secondary Special

		<p>Schools within the city, which cater for children with special educational need as well as a Pupil Referral Unit to ensure all young people have access to education.</p> <p>Sunderland City Council signpost schools to grant opportunities such as the Queen’s Green Canopy tree planting rewilding programme as well as to share regular information on relevant sustainability-related climate events and initiatives at local, regional, national and international level. Sunderland’s Children’s Services Company, Together for Children, and the Council’s Low Carbon Team work closely together to offer opportunities to all primary, secondary and special schools across the city. Sunderland is currently recruiting the city’s first Associate School Improvement Advisors who will specialise in sustainable education and will be available to support all schools with their curriculum activities. In autumn 2021 Sunderland City Council launched and funded some COP26 grants which saw 6 secondary schools and 2 primary schools design and deliver a range of carbon-cutting initiatives, from planting trees to creating orchards, reducing single-use plastics and harvesting willow.</p> <p>The Council’s Public Health team, Low Carbon team, Change 4 Life team and school catering service are all collaborating in the design of a city-wide Food and Nutrition Charter mark. All schools and children’s settings are eligible to apply and the Bronze level was rolled out in 2021. There is significant focus on environmental sustainability including plant-based and planet-friendly diets, waste minimisation and seasonal eating among other initiatives. The first school was accredited in 2022 and teams are now working to develop the silver (2022/23) and gold (2023/24) levels – including with consultation and engagement from the EGS group.</p>
<p>Access to education</p>	<p>Supports Significantly supports</p>	<p>The Climate Commission for UK Higher and Further Education is in place to catalyse action to create real impact and drive change within College and</p>

		<p>University education.</p> <p>Sunderland College provides further and higher education courses to approximately 11,100 students. As well as having developed their own Low Carbon Action Plan in 2022 and greening their own operations and curricula (e.g. travel and transport students working on sustainable and virtual travel options; introduction of a pollinator and produce garden on City Campus; food waste minimisation strategies being taken forward for catering courses etc.) Sunderland College provides significant opportunity for learners to be involved in sustainability activities, including as Green Champions. Sunderland University provides undergraduate and postgraduate degree courses to students across three campuses in Sunderland, London and Hong Kong. As of 2020/21 there were 24,430 students at Sunderland University with 11,470 studying at Sunderland Campus. As well as signing off their own Low Carbon Action Plan this year, the University provides opportunities for students to take part in activities including the Student Engagement Sustainability Group and the Student Union’s Environmental Society and this year the University and City Council have worked in partnership to develop opportunities for artistic residencies via the Faculty for Arts and Creative Industries within climate-relevant settings, locations and activities within the city for those studying Creative Writing and Photography. Both Sunderland College and the University of Sunderland were sponsors of the Sunderland 60 Common Purpose Legacy programme</p>
<p>Access to healthcare</p>	<p>Supports Significantly supports</p>	<p>The UK National Health Service (NHS) ensures that every citizen in the UK has access to medical and health care services without charge. Therefore, Sunderland’s residents have universal access to treatment or support including where this is caused by climate change induced ill-health.</p> <p>NHS Sunderland Clinical Commissioning Group plans and buys local NHS care and services to meet the needs of 280,000 people and 53 GP practices, split by the areas of Coalfield, Sunderland East,</p>

		<p>Sunderland North, Sunderland West, and Washington. The city has a handful of primary care centres providing urgent and primary care including Washington, Bunny Hill, Houghton, Pallion and Grindon Lane. South Tyneside & Sunderland NHS Foundation Trust also provides a range of community healthcare services, including St Benedict's Hospice & Specialist Palliative Care in Sunderland and operates facilities across the city including the Sunderland Royal Hospital, The Eye Infirmary and The Galleries Health Centre in addition to Monkwearmouth Hospital, which is operated by Cumbria, Northumberland, Tyne & Wear NHS Foundation Trust.</p> <p>The NHS has also published their own climate change mitigation and adaptation plan, aiming to become the world's first national health system to become net-zero, in line with the UK's low carbon targets. South Tyneside & Sunderland NHS Foundation Trust and the Clinical Commissioning Group are part of the 2030 Shadow Board and committed to playing their part in the city's climate change approach.</p>
<p>Land use planning</p>	<p>Supports Significantly supports</p>	<p>Land use planning in Sunderland accounts for climate change mitigation and adaptation, to help reduce the vulnerability of our residents, environment and economy to the effects of climate change. The Council's Local Plan is informed by a detailed evidence base which includes a Strategic Flood Risk Assessment to ensure that development is directed towards locations which are not at risk of flooding. The Plan has also been informed by a Sustainability Appraisal and Strategic Environmental Assessment, which considered the climate change impacts of all policies. The Council has also prepared a number of site specific Supplementary Planning Documents (SPDs) for strategic development sites within the city, which provide more detailed guidance on how the sites should be brought forward for development. These SPDs have also taken into consideration climate change mitigation and adaptation as part of their preparation. Wider examples include the city's Local Flood Risk Management Strategy and to a certain</p>

		extent the city's five Neighbourhood Investment Plans.
Public health	Challenges Moderately challenges	<p>The health of people in Sunderland is generally worse than the English national average. According to the UK Indices of Multiple Deprivation, Sunderland is one of the 20% most deprived districts/unitary authorities in England.</p> <p>Life expectancy data from December 2021 shows that life expectancy at birth for males in Sunderland is 76.6 for 2018-20, compared with 77.6 for the North East and 79.4 for England. Life expectancy at birth for females in Sunderland is 80.9 for 2018-20, compared with 81.5 for the North East and 83.1 for England. Whilst average life expectancy at birth had improved for a number of years, the city continues to lag behind the North East and England positions and the people of Sunderland live, on average, shorter lives than the England average. They also live, on average, a greater part of their lives with illness or disability which limits their daily activities. Data from May 2022 for 2018-20 shows that healthy life expectancy for males in Sunderland is 56.1, which is lower than the North East figure of 59.1 and the England figure of 63.1. Healthy life expectancy for females in Sunderland is 56.9, which is lower than the North East figure of 59.7 and the England figure of 63.9.</p> <p>Many residents have underlying health conditions. Due to this, Sunderland has many residents who are vulnerable to climate hazards such as flooding, air pollution, heatwaves, and cold waves.</p>
Poverty	Challenges Significantly challenges	<p>According to the UK Indices of Multiple Deprivation, Sunderland's unemployment is 5.9% as of 2021; and 18,513 households in Sunderland are in fuel poverty as of 2020. 11,395 children in Sunderland live in low-income families and the percentage of primary school children eligible for and claiming free school meals increased by 8.3% between 2015 – 2021, from 19.4% to 27.7%. There is also a high degree of inequality within the city, with significant differences in the quality of life between different wards in the city.</p>

		<p>Climate change presents numerous issues for Sunderland residents who live in poverty. For example, these citizens may reside in poor quality housing which may be poorly insulated. This makes them more vulnerable to cold waves and poor winter weather, which is likely to increase in frequency, length, and magnitude in the future. Likewise, as the frequency and intensity of flooding events are likely to increase in the future due to climate change, poverty levels may reduce the ability of some residents to obtain adequate insurance. An important part of adapting to climate change is being able to support all our residents who may be impacted.</p>
<p>Community engagement</p>	<p>Supports Moderately supports</p>	<p>For Sunderland to achieve carbon neutrality, and adapt to climate change, collective action is needed. It will require the input and commitment of every resident and business. However, a survey conducted with Sunderland residents in November 2019 concluded that there is a need for further climate change awareness building, with around 1/3 of the population indicating they need more information on ways they can reduce their environmental impact, to help the city adapt in the future. The Council and its partners have identified public engagement as one of its strategic priorities within the Low Carbon Framework to help raise awareness. Reducing carbon emissions is also a key element of the Community Wealth Building charter which anchor organisations across the city are committed to working towards as part of the city’s Community Wealth Building Strategy as referenced elsewhere in question 6.0.</p> <p>EGS brings together young people from primary, special and secondary schools alongside reps from Sunderland Youth Council, young people’s minority forums, detached youth work settings, Sunderland College, and the University of Sunderland to provide a forum where young people’s opinions on this pressing matter can be heard. The group was developed by young people and is inclusive. Members are supported to meet and discuss the city’s plans and feed into these. Members sit on the 2030 Shadow Board and feed into the group</p>

		<p>discussions.</p> <p>In addition, plans are in place to begin to work pro-actively across the areas covered by each of the Neighbourhood Investment Plans to identify opportunities for engagement in relation to the city-wide low carbon target. This work is ongoing and will be further built into the updated Neighbourhood Investment Plans which are expected to be completed by March 2023.</p>
Access to quality / relevant data	Challenges Somewhat challenges	<p>Over the past year, the Council has worked to improve the quality of its environmental datasets for both the Council's operations as well as the city as a whole, having recognised the benefits of a data driven approach to tackling climate change. However, on a citywide level, there is a lag time on several publicly available environmental datasets. This means that it is harder to set useful targets and monitor performance on a citywide level in real time.</p>
Budgetary capacity	Challenges Significantly challenges	<p>There is a limited budget to put in place all appropriate mitigation measures including, but not limited to, the required level of retrofitting and EV infrastructure needed. The Council is heavily reliant on grants provided by central government. Similarly, the budget for adaptation measures is limited.</p> <p>Low Carbon has a dedicated budget to support activity which can reduce emissions. This includes resourcing a strong central team to lead and co-ordinate emissions reduction activity across the Council and with city partners.</p>
Infrastructure capacity	Challenges Moderately challenges	<p>Sunderland currently has some cycling infrastructure and Government policy increasingly is asking for segregated cycle lanes. While cycling infrastructure is being scaled up within the city through the LCWIP referenced earlier, there is much outstanding work to be done.</p>
Housing	Challenges Significantly challenges	<p>80% of the buildings that will exist in the UK in 2050 have already been built. They were built at a time when climate change and energy considerations were a lower priority. Existing buildings typically have a large carbon footprint due to the energy required to heat them. Adapting homes to be more energy efficient and resilient to climate change will</p>

		<p>improve living conditions, reduce energy demand, reduce fuel costs, improve health and wellbeing of residents and help minimise incidents of fuel poverty in the city.</p> <p>The average EPC rating of Sunderland homes is currently D61, which is slightly worse than the national average for England of D66. There are 18,000 homes in Sunderland with E, F or G EPC ratings, indicating low energy efficiency levels. These properties are a priority for retrofitting. There are also 37,000 properties in Sunderland without a registered EPC, making it difficult to measure the scale of the retrofit challenge.</p> <p>There are currently relatively low levels of domestic and non-domestic retrofitting taking place in the city, other than by the Council and registered housing providers, such as Gentoo and a handful of proactive private homeowners. This is partly due to a lack of knowledge and demand for retrofitting, limited access to funding (including low-cost loans), lack of skills and local supply chain, and a lack of financial incentives and business models to make investment in retrofit stack up for homeowners, public and private landlords. This is in part due to the amount it costs to retrofit a property and the time it takes to recover that investment through reduced energy costs.</p>
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2. Emissions Inventory


Emissions Inventory Methodology

(2.1) Does your jurisdiction have a community-wide emissions inventory to report?

Yes

(2.1a) Provide an attachment (in spreadsheet format) or a direct link to your community-wide emissions inventory. In addition, select the inventory year and report the jurisdiction’s population for that year.

	Community-wide inventory attachment (spreadsheet)	Status of community-wide inventory attachment	Inventory year [^]	Population in inventory year [^]	Comment
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	and/or link (with unrestricted access)^	and/or direct link			
Response	 1	The emissions inventory has been attached	2019	277,705	<p>SCATTER is based on the Accounting and Reporting Standard developed by the Greenhouse Gas Protocol for Community-Scale Greenhouse Gas Emissions Inventories.</p> <p>Some parts of our inventory are not estimated by SCATTER. SCATTER is continually working to improve the accuracy and functionality of the tool.</p> <p>SCATTER data is verified by SCATTER only, we will consider having our city data externally verified in the future, to increase our confidence in the data.</p> <p>Please note the population figure for 2019 is a mid-year estimate for that year from BEIS and varies from the figures provided through the 2021 Census for question 0.1.</p>

 1SCATTER_sunderland_CDP-report-inventory_2019 (1).xlsx

(2.1b) Provide the following information regarding your latest community-wide GHG emissions inventory.

Boundary of inventory relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Primary methodology/framework to compile inventory

Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC)

Tool used to compile inventory

SCATTER

Gases included in inventory^

CO2

CH4

N2O

Source of Global Warming Potential values

IPCC Fourth Assessment Report (2007)

Emissions Inventory Data

GCoM Common Reporting Framework Reporting Requirements for European Cities

(2.1d) Provide a breakdown of your community-wide emissions in the format of the Common Reporting Framework.

	Direct emissions (metric tonnes CO2e)^	If you have no direct emissions to report, please select a notation key to explain why^	Indirect emissions from the use of grid-supplied electricity, heat, steam and/or cooling (metric tonnes CO2e)^	If you have no indirect emissions to report, please select a notation key to explain why^	Emissions occurring outside the jurisdiction boundary as a result of in-jurisdiction activities (metric tonnes CO2e)	If you have no emissions to report that are occurring outside the jurisdiction boundary as a result of in-jurisdiction activities, please select a notation key to explain why	Please explain any excluded sources, identify any emissions covered under an ETS and provide any other comments ^

Stationary energy > Residential buildings^	311,879.11		96,328.7		56,103.61		
Stationary energy > Commercial buildings & facilities^	38,274.02		83,913.5		17,699.94		
Stationary energy > Institutional buildings & facilities^	31,392.08		18,219.86		6,843.27		
Stationary energy > Industrial buildings & facilities^	112,163.09		102,222.1		35,814.26		
Stationary energy > Agriculture^	874.7		0.17		208.21		
Stationary energy > Fugitive emissions^	39,382.18		0	NO	0	NE	All estimated fugitive emissions are direct. Scope 3 fugitive emissions are beyond the scope of the current analysis.
Total Stationary Energy	533,965.18		300,684.33		116,669.28		
Transportation > On-road^	356,368.25		0	IE	9,742.83		Electricity consumption from on-road transport included in

							Stationary Energy figures
Transportation > Rail^	565.16		0	IE	134.51		Electricity consumption from rail transport included in Stationary Energy figures
Transportation > Waterborne navigation^	4,083		0	IE	0	IE	All UK waterborne transport assumed to be diesel.
Transportation > Aviation^	0	NO	0	IE	153,928.4		Electricity consumption from aviation not possible to separate from stationary energy data.
Transportation > Off-road^	3,557.62		0	IE	0	NE	Electricity consumption from off-road transport included in Stationary Energy figures
Total Transport	364,574.04		0	IE	163,805.71		

Waste > Solid waste disposal^	4,221.73		0	IE	0	IE	Scope 2 / 3 waste covered under stationary Energy.
Waste > Biological treatment^	0	NO	0	IE	0	IE	Scope 2 / 3 waste covered under stationary Energy.
Waste > Incineration and open burning^	1,925	NO	0	IE	0	IE	Scope 2 / 3 waste covered under stationary Energy.
Waste > Wastewater^	5,059.84		0	IE	0	IE	Scope 2 / 3 waste covered under stationary Energy.
Total Waste	11,206.57		0	NE	0	IE	Scope 2 / 3 waste covered under stationary Energy.
IPPU > Industrial process	99,433.37		0	IE	0	NE	Beyond the scope of the current analysis; we plan to include in future.
IPPU > Product use	0	NE	0	IE	0	NE	Beyond the scope of the current analysis; we plan to include in future.

Total IPPU	99,433.37		0	IE	0	NE	Beyond the scope of the current analysis; we plan to include in future.
AFOLU > Livestock	1,110.19		0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
AFOLU > Land use	-8,693.99		0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
AFOLU > Other AFOLU	0	NE	0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
Total AFOLU	-7,583.81		0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
Generation of grid-supplied energy > Electricity-only generation^	0	NO	0	NE	0	NO	
Generation of grid-	0	NO	0	NE	0	NO	

supplied energy > CHP generation^							
Generation of grid-supplied energy > Heat/cold generation^	0	NO	0	NE	0	NO	
Generation of grid-supplied energy > Local renewable generation	1.47		0	NO	0	NO	We have not extracted electricity-specific emissions from factors used for renewable electricity. All emissions are included in Scope 1.
Total generation of grid-supplied energy	1.47		0	NE	0	NE	
Total Emissions (excluding generation of grid-supplied energy)	1,001,596.8 2		300,684.3 3		280,479.99		

3. Sector Assessment Data

Energy Data

(3.1) Report the total annual electricity and heating and cooling consumption data (in MWh) and the percentage breakdown of this consumption by energy type for your jurisdiction.

Electricity consumption

Total annual jurisdiction-wide consumption in MWh

1,065,251

Data source used to provide percentage breakdown of consumption by energy type

National-level data

Percentage of total consumption from coal

3

Percentage of total consumption from gas

37

Percentage of total consumption from oil

1

Percentage of total consumption from nuclear

20

Percentage of total consumption from hydropower

1

Percentage of total consumption from bioenergy (biomass and biofuels)

18

Percentage of total consumption from wind

12

Percentage of total consumption from geothermal

0

Percentage of total consumption from solar (PV and thermal)

2

Percentage of total consumption from waste to energy (excluding biomass component)

6

Percentage of total consumption from other renewable sources

0

Percentage of total consumption from other non-renewable sources

0

Year data applies to

2021

Comment

Total electricity consumption is the Sunderland citywide figure derived from the Regional and local authority electricity consumptions statistics, published annually by the Department for Business, Energy and Industrial Strategy (BEIS). The source mix is based on national data based on the most recent Digest of UK Energy Statistics

(DUKES).

Further information can be found at <https://www.gov.uk/government/statistics/digest-of-uk-energy-statistics-dukes-2022> and <https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics>

Heating and cooling consumption

Total annual jurisdiction-wide consumption in MWh

2,191,114

Data source used to provide percentage breakdown of consumption by energy type

National-level data

Percentage of total consumption from coal

0.4

Percentage of total consumption from gas

89

Percentage of total consumption from oil

0.4

Percentage of total consumption from bioenergy (biomass and biofuels)

1.9

Percentage of total consumption from geothermal

0

Percentage of total consumption from solar (PV and thermal)

0

Percentage of total consumption from waste to energy (excluding biomass component)

0

Percentage of total consumption from other renewable sources

4.9

Percentage of total consumption from other non-renewable sources

3.4

Year data applies to

2019

Comment

Total heating and cooling consumption is taken from Sunderland's Scatter inventory, which accounts for domestic, industrial and commercial heating and cooling consumption within the city boundary. The source mix is based on the Scatter data and

the ESO data portal. Further information can be found at
<https://data.nationalgrideso.com/carbon-intensity1/historic-generation-mix>.

(3.2) For each type of renewable energy within the jurisdiction boundary, report the installed capacity (MW) and annual generation (MWh).


	Installed capacity (MW)	Annual generation (MWh)	Year data applies to	Comment
Solar PV	29.01	28,669.271	2020	Data provided by the Department for Business, Energy & Industrial Strategy.
Solar thermal	0	0		
Hydropower	0	0		
Wind	14.73	37,828.03	2020	Data provided by the Department for Business, Energy & Industrial Strategy.
Bioenergy (Biomass and Biofuels)	0	0		
Geothermal	0	0		
Other	1.96	7,235	2020	Data provided by the Department for Business, Energy & Industrial Strategy. This data is for landfill gas.

(3.3) Report the following energy access related information for your jurisdiction.

Indicator and metric used	Indicator value	Year data applies to	Comment
Annual energy consumption per capita kWh per person	3.83	2020	Electricity consumption per capita
Annual energy consumption per capita kWh per person	9.03	2020	Gas consumption per capita

(3.4) How many households within the jurisdiction boundary face energy poverty? Select the threshold used for energy poverty in your jurisdiction.

Indicator used to quantify energy poverty	Percentage of households or total population within the jurisdiction	Threshold used for energy poverty	Comment

		boundary that face energy poverty		
Response	Percentage of households within the jurisdiction boundary that face energy poverty	14.6	Other, please specify See comments section	<p>Fuel poverty in England is now measured using the Low Income Low Energy Efficiency (LILEE) indicator rather than the old Low Income High Costs (LIHC) indicator.</p> <p>Under the LILEE indicator, a household is considered fuel poor if:</p> <ul style="list-style-type: none"> - They are living in a property with a fuel poverty energy efficiency rating of band D or below; and - When they spend the required amount to heat their home, they are left with a residual income below the official poverty line. <p>Fuel poverty is a significant issue in Sunderland. According to the UK Government, 15,110 children in Sunderland live in low-income families in 2021 (30.8%) and 18,513 households in Sunderland are in fuel poverty as of 2020.</p> <p> 1</p>

 1sub-regional-fuel-poverty-2022-tables (2).xlsx

Transport Data

(3.5) Report your jurisdiction’s passenger and/or freight mode share data.

Please complete

Passenger mode share data to report

Passenger mode share as share of trips

Passenger mode share: Walking

8.8

Passenger mode share: Cycling

1.3

Passenger mode share: Micromobility (including e-scooters)

0

Passenger mode share: Buses (including Bus Rapid Transit)

12

Passenger mode share: Rail/Metro/Tram

2.1

Passenger mode share: Ferries/ River boats

0

Passenger mode share: Taxis or shared vehicles (e.g. hire vehicles)

0

Passenger mode share: Private motorized transport

68.2

Passenger mode share: Other

6.1

Total passenger mode share reported

98.5

Freight mode share data to report

Freight mode share as share of vehicle distance travelled

Freight mode share: Motorcycle / Two wheeler

Freight mode share: Light Goods Vehicles (LGV)

87

Freight mode share: Medium Goods vehicles (MGV)

Freight mode share: Heavy Goods vehicles (HGV)

13

Freight mode share: Rail

Freight mode share: Inland water transport

Freight mode share: Other

Total freight mode share reported

Comment

Based on 2011 census data.

Waste Data

(3.7) Report the following waste-related data for your jurisdiction.

	Data availability	Response (in unit specified)	Comment
Amount of solid waste generated (tonnes/year)	Reporting jurisdiction-level data	132,286	<p>This figure of 132,286 represents all local authority collected waste for the 2020/21 financial year (April – March). Of these 132,286 tonnes, 91% is domestic, and 9% non-domestic.</p> <p>These figures are taken from a national BEIS dataset for Local Authority Collected and Household Waste. The dataset is derived from WasteDataFlow, a web-based system for quarterly reporting on Local Authority collected waste data by local authorities to central Government.</p>
Percentage of the solid waste generated that is diverted away from landfill or incineration (%)	Reporting jurisdiction-level data		Of the 132,286 tonnes of solid waste managed within the city, 35,333 were either recycled, composted, reused, equating to 27%.
Percentage of the diverted solid waste generated that is recycled (%)			
Percentage of the diverted solid waste generated that is utilized for waste to energy (%)			
Percentage of the diverted solid waste generated that is reused (%)			
Percentage of waste collected where separation at source is taking place (%)			
Total annual amount of food waste produced in			

the jurisdiction (tonnes/year)			
Volume of wastewater produced within the jurisdiction boundary (megalitres/year)			
Percentage of wastewater safely treated to at least secondary level (%)			

Public Health Data

(3.8) Report on how climate change impacts health outcomes and health services in your jurisdiction.

Health area affected by climate change

Health outcomes

Identify the climate hazard(s) that most significantly impact the selected health area

- Extreme heat
- Extreme cold
- Snow and ice
- Urban flooding
- River flooding
- Coastal flooding
- Other coastal events
- Extreme wind
- Storm
- Heavy precipitation
- Air pollution

Identify the health issues driven by the selected climate hazard(s)

- Heat-related illnesses
- Cold-related illnesses
- Exacerbation of non-communicable disease symptoms - respiratory disease
- Exacerbation of non-communicable disease symptoms - cardiovascular disease
- Mental health impacts
- Direct physical injuries and deaths due to extreme weather events
- Disruption to water, sanitation and wastewater services
- Disruption to health service provision
- Overwhelming of health service provision due to increased demand
- Damage/destruction to health infrastructure and technology
- Disruption of health-related services

Timeframe of impact

Medium-term (2026-2050)

Identify which vulnerable populations are affected by the selected health issue(s)

Children and youth
Elderly
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

What factors affect your jurisdiction's ability to address the selected health issues

Lack of financial capacity

Comment

Health area affected by climate change

Health systems

Identify the climate hazard(s) that most significantly impact the selected health area

Extreme heat
Extreme cold
Snow and ice
Urban flooding
River flooding
Coastal flooding
Other coastal events
Extreme wind
Storm
Heavy precipitation
Air pollution

Identify the health issues driven by the selected climate hazard(s)

Heat-related illnesses
Cold-related illnesses
Exacerbation of non-communicable disease symptoms - respiratory disease
Exacerbation of non-communicable disease symptoms - cardiovascular disease
Mental health impacts
Direct physical injuries and deaths due to extreme weather events
Disruption to water, sanitation and wastewater services
Disruption to health service provision
Overwhelming of health service provision due to increased demand
Damage/destruction to health infrastructure and technology

Disruption of health-related services

Timeframe of impact

Medium-term (2026-2050)

Identify which vulnerable populations are affected by the selected health issue(s)

Children and youth
Elderly
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

What factors affect your jurisdiction's ability to address the selected health issues

Lack of financial capacity

Comment

Health area affected by climate change

Areas outside the health sector

Identify the climate hazard(s) that most significantly impact the selected health area

Extreme heat
Extreme cold
Snow and ice
Urban flooding
River flooding
Coastal flooding
Other coastal events
Extreme wind
Storm
Heavy precipitation
Air pollution

Identify the health issues driven by the selected climate hazard(s)

Heat-related illnesses
Cold-related illnesses
Exacerbation of non-communicable disease symptoms - respiratory disease
Exacerbation of non-communicable disease symptoms - cardiovascular disease
Mental health impacts
Direct physical injuries and deaths due to extreme weather events
Disruption to water, sanitation and wastewater services
Disruption to health service provision

Overwhelming of health service provision due to increased demand
Damage/destruction to health infrastructure and technology
Disruption of health-related services

Timeframe of impact

Medium-term (2026-2050)

Identify which vulnerable populations are affected by the selected health issue(s)

Children and youth
Elderly
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

What factors affect your jurisdiction's ability to address the selected health issues

Lack of financial capacity

Comment

(3.9) Provide information on the current impact of the COVID-19 pandemic on climate action in the jurisdiction.

Response

Impact of COVID-19 on the implementation of climate action policies in your jurisdiction

Increased emphasis on climate action

Impact of COVID-19 economic response on jurisdiction's budget for financing climate action in your jurisdiction

No change on finance available for climate action

Climate-related impact of COVID-19 recovery interventions

Recovery interventions that develop or strengthen universal social protection systems that enhance resilience to shocks, including climate change
Recovery interventions that support just transition strategies for workers and communities
Recovery interventions that boost public and sustainable transport options
Recovery interventions that build out broadband and internet services to those with inadequate access
Recovery interventions that scale up investments in and access to digital technologies, funding mechanisms, and capacity-building solutions to enhance resilience to shocks, including climate change

Recovery interventions which increase the quality and quantity of access to urban green spaces and channel investment into green infrastructure and nature-based solutions for the benefit of all

Comment

COVID-19 has significantly impacted Sunderland. Therefore, more than ever, ensuring our communities are resilient is vital for a just transition. A key strategic priority in Sunderland's Community Wealth Building Strategy (CWBS) is Improving Community Resilience and the City Council, in partnership with the voluntary and community enterprise sector, is working to improve community resilience. This has so far included: publishing a Statement of Intent for measures to address fuel poverty/energy efficiency in private homes; launching an affordable credit solution for all residents and staff; recommissioning advice provision for benefits, debt, employment and housing across neighbourhoods; developing a 'Making your money go further' toolkit; adopting a standard financial assessment; a coordinated approach to debt support; implementing a financial resilience service to support the new Council Housing Service in creating sustainable tenancies; reviewing Adult Learning specifications to reflect a better aligned curriculum with meaningful progression pathways for learners to achieve their goals; and increasing resident participation in digital opportunities. This has led to numerous positive outcomes to improve community resilience in the city. For example: over £1 million in financial gains for Sunderland residents has been achieved by Welfare Rights Service and first tier advice providers; the Council has paid for organisations' Fareshare subscriptions – providing 78 tonnes of extra food for residents; over 650 Credit Union members; over 2000 local welfare provision Crisis and Community Care awards, and Discretionary Housing Payment awards have been made by the council to vulnerable Sunderland residents; 33 organisations have been given funding worth £19,500 to purchase essential care items for their customers; and 34 organisations were provided with 3000 council resilience packs to give to their own customers - which included Tesco cards worth a total of £60,000. CWBS work is ongoing and the inclusion of Low Carbon in CWB charters is going to be signed by all partner organisations. The City Council is committed to ensuring that we take an inclusive approach to engagement that addresses the four dimensions of health inequalities, as set out within the Sunderland Healthy City Plan (i.e. protected characteristics, geographical, socio-economic and other health and vulnerable groups).

Regarding transport, Sunderland recently secured £1.125 million from the Department for Transport Active Travel Fund to support local active travel. The fund supports the installation of temporary projects for COVID-19 recovery as well as longer-term projects. Sunderland plans to use this funding to develop the A183 cycleway on Whitburn Road with the scheme being implemented during the next year. This will increase health and wellbeing and reduce emissions. In addition, the LCWIP referenced earlier is aiming to increase the walking and cycling network throughout the city.

The Active Sunderland Board (ASB), which brings together key organisations that can influence physical activity in Sunderland, work to tackle the largest issues that lead to inequalities in physical activity. This includes recovering from COVID-19 and reinventing as a vibrant, relevant, and sustainable network of organisations providing physical

activity opportunities to meet the needs of different people. ASB will encourage increased investment in physical activity increasing active travel as a climate action synergy. The ASB also aims to maximise access to green and blue space for physical activity, improving public health.

Regarding recovery interventions that build out broadband and internet services to those with inadequate access, and recovery interventions that scale up investments in - and access to - digital technologies, funding mechanisms, and capacity-building solutions, Sunderland has an ambitious Smart City Vision and Delivery Programme available at (<https://www.sunderlandoursmartcity.com>). Sunderland has attracted significant investment to deliver ubiquitous next generation digital connectivity, leaving no one and nowhere behind. This is enabling the delivery of a raft of transformational use cases, accelerating the benefits from digital technologies across all sectors from Smart Homes/Assistive Technologies to Connected Automated Logistics.

COVID-19 has increased the Council’s focus on agile working, with a more flexible, updated agile working policy. Agile working is being encouraged by Council leadership and should also reduce risk of staff shortage at key times as staff can work from home if weather is severe. Also, the agile working approach will routinely reduce emissions from operational buildings. Finally, agile working will geographically spread the work of the council city-wide and beyond, reducing the business continuity impact of any power outages with a lower concentration of staff likely to be affected as within one large building.

(3.10) Report the following air pollution data for the jurisdiction.

Air pollution metric	Value	Weblink to air pollution data from monitoring site(s)	Comment
Particulate Matter PM2.5 concentration (annual average) level (ug/m3)	6	https://uk-air.defra.gov.uk/data/exceedance - UK Defra Annual and Exceedance Statistics https://www.wecare4air.co.uk/air-quality-data/sunderland-trimdon-street/ - Sunderland Trimdon Street	Data measured at the Silksworth Lane Site and Trimdon Street Site. This data was collected during 2021 when the impact of COVID meant there was less traffic on the roads due to government advice to work from home and hence there is likely to be a corresponding decrease in pollution levels.
NO2 concentration (annual average) level (ug/m3)	26	https://uk-air.defra.gov.uk/data/exceedance - UK Defra Annual and Exceedance Statistics	Data measured at the Silksworth Lane Site and Trimdon Street Site.

		https://www.wecare4air.co.uk/air-quality-data/sunderland-trimdon-street/ - Sunderland Trimdon Street	This data was collected during 2021 when the impact of COVID meant there was less traffic on the roads due to government advice to work from home and hence there is likely to be a corresponding decrease in pollution levels.
Number of days exceeding air quality guidelines/standards (times/year)	2	https://uk-air.defra.gov.uk/data/exceedance - UK Defra Annual and Exceedance Statistics https://www.wecare4air.co.uk/air-quality-data/sunderland-trimdon-street/ - Sunderland Trimdon Street	Data measured at the Silksworth Lane Site and Trimdon Street Site. This data was collected during 2021 when the impact of COVID meant there was less traffic on the roads due to government advice to work from home and hence there is likely to be a corresponding decrease in pollution levels.

(3.11) Provide details of the household access to water, sanitation services and water consumption in your jurisdiction.

Response

Data availability

Data is available for the percentage of households with access to safely managed drinking water services

Data is available for the percentage of households with access to safely managed sanitation services

Data is available for the average household water consumption in litres per capita per day

Percentage of households with access to safely managed drinking water services

100

Percentage of households with access to safely managed sanitation services

100

Household water consumption (litres/capita/day)

140

Comment

Northumbrian Water (NW) is responsible for supplying Sunderland with water. Sunderland is covered in its entirety by the Kielder Resource Zone (WRZ). Water supply in North East England is particularly resilient to future climate change, due to the Kielder Reservoir, and it is expected that the WRZ will be in a supply surplus up to the end of the current Northumbrian Water Resources Management Plan (WRMP) period. This means that there is widespread citywide access to safely managed drinking water and sanitation services.

Within the Kielder WRZ, average per capita consumption is currently 140l/person/day. Northumbrian Water aims to achieve a household consumption of 110l/household/day by 2050.

The Northumbrian Water Resources Management Plan 2021-2025 aims to reduce leakage by 15% between 2020 and 2025, and a further 10% over each subsequent 5-year periods through to 2045. In addition, the WRMP aims to annually reduce per capita water consumption by 0.12l/head/day (0.33 Ml/day) by delivering water efficiency activities. This will not only improve water resource efficiency and security but will also save both the company and residents money.

Northumbrian Water recently received a four-star rating (highest possible) on an Environmental Performance Assessment for 2020 by the Environment Agency. Building on this, Northumbrian Water aim to build on this achievement and have more than £700 million of investment planned in their current Business Plan period 2020-2025. Northumbrian Water launched their 'Improving the Water Environment' scheme, where Northumbrian Water will help to deliver improvements to water quality among other areas.

These targets include but are not specific to Sunderland; they relate to the wider region aligned to the geographic remit of Northumbrian Water.

Food data

(3.12) What percentage of your population is food insecure and/or lives in a food desert?

	Data availability	Percentage of population that is food insecure	Percentage of population that lives in a food desert	Comment

Response	<p>Data available for the percentage of population that is food insecure</p> <p>Data available for the percentage of population that lives in a food desert</p>	9.8	15.9	<p>The percentage of population that is food insecure was assessed using a study from the University of Sheffield in 2021. The study breaks down data for local authorities into the percentage of people who were 'hungry', 'struggling' and 'worried about' access to food.</p> <p>Those who are hungry include people who indicated that they were hungry but were unable to eat food because they could not afford it, or were unable to access food in the previous month.</p> <p>Those who are struggling to access food, include those who may have sought help within the last month with access to food, have cut back on meals and healthy foods to stretch tight budgets, or indicated that they struggled to access food in some way.</p> <p>Those who worry about food insecurity or being able to continue to supply adequate food for their household. These people may be just about managing but could slip into food insecurity as a result of an unexpected crisis.</p> <p>As of January 2021, 3.23% of people were hungry, 9.83% of people were struggling and 13.60% of people were worried. Sunderland class people who are hungry or struggling as currently being in food insecurity and people who are worried as being at significant risk of slipping into food insecurity. The GIS-based analysis can be found at https://www.sheffield.ac.uk/news/new-map-shows-where-millions-uk-residents-struggle-access-food.</p> <p>The percentage of population living in a food desert was calculated firstly by working out many households were outside of a 1-mile radius using UPRN data. The number of people per household was calculated by dividing the total population (277,846) by the number of dwellings (132,919) in the city, leaving a ration of 2.1 people per household</p>
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				<p>(1 decimal place). The 2.1 ratio was then applied afterwards to work out the population within a food desert, before using the latest ONS population estimates to calculate the proportion of the overall population that fell within one.</p> <p>The current cost of living crisis is increasing food insecurity in Sunderland. This is evidenced by the number of young people who are qualifying for free school meals increasing. It is likely that Sunderland's position has worsened since 2021.</p>
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(3.13) Report the total quantity of food that is procured (in tonnes) for government-owned and/or operated facilities (including municipal facilities, schools, hospitals, youth centers, shelters, public canteens, prisons etc.). If available, please provide a breakdown per food group.

	Total quantity of food procured (tonnes)	Breakdown of procured food by food group	Year data applies to	Comment
Response	1,971.5	<p>The following breakdown for schools, public canteens and shelters is currently available, and is based on spend:</p> <ul style="list-style-type: none"> • Frozen food = 45% • Fruit and veg = 17% • Groceries = 25% • Meat = 13% <p>A breakdown for hospitals is currently unavailable.</p>	2,021	<p>It is predicted that Sunderland schools serve 2,090,000 meals per year, equating to 709 tonnes. This is based on 11,000 meals being served daily equating to circa 2,090,000 meals per annum.</p> <p>It is predicted that Sunderland's City Hall canteen, the Brew and Bake, serves 109,044 meals per year, equating to 37 tonnes. This figure is an estimate on the basis that there will be 2,756 customers per week for 52 weeks of the year, equating to 145,932 customers per annum. It is assumed that 75% of customers are buying food, equating to 109,044 meals and 37 tonnes per annum,</p> <p>It is predicted that shelters serve 2,190,000 meals per year, equating to 482.5 tonnes per year. This is based on roughly 2,000 people in residential care and nursing homes and is the same figure</p>

				<p>used as last year.</p> <p>It is predicted that hospitals in Sunderland serve 919,029 meals per year, equating to 482.5 tonnes. For the period 01.04.2020 – 31.03.2021 there were 750,593 patient meals and 168,436 staff / visitor meals. These numbers are reduced due to COVID-19 with reduced hospital admissions due to the pausing of elective services for a period of time. The number of patient meals in 2019/20 were 1,043,196.</p> <p>There are no prisons in Sunderland.</p>
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Water Data

(3.14) Report the sources of your jurisdiction's water supply, volumes withdrawn per source, and the projected change.

Source of jurisdiction's water supply	Are you able to report volumetric data for this source?	Annual volume of water withdrawn per source (in megalitres)	Projected level of change over next 5-10 years	Comment
Fresh surface water, including rainwater, water from wetlands, rivers and lakes	Yes	14,197.93	Higher volume projected to be withdrawn	<p>Figures are calculated by multiplying the current water consumption per capita (140l/person/day) by 365 to find the annual consumption per capita (51,100l/person/day) and multiplying by the current population (277,846).</p> <p>If growth in Sunderland occurred according to the development strategy of 14,751 dwellings from 2015-2033, it would result in an increase in the number of households of approximately 12.1%. Growth in Northumbrian Water's plans are aligned with this expected growth, however the most recent figures show a slight decline in population.</p>

				Note this figure is in relation to domestic water use only. It is hoped a more holistic figure can be provided in future.
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Targets

4. Adaptation Goals

(4.1) Does your jurisdiction have an adaptation goal(s) in place? If no adaptation goal is in place, please indicate the primary reason why.

Yes, our jurisdiction has an adaptation goal(s)

(4.1a) Report your jurisdiction’s main adaptation goals.

Select a reference ID for the goal

Adaptation goal 1

Adaptation goal^

Reduce citywide flood risk

Climate hazards that goal addresses^

- Urban flooding
- River flooding
- Coastal flooding
- Other coastal events
- Storm
- Heavy precipitation

Base year of goal (or year goal was established if no base year)^

2,017

Target year of goal^

2022

Description of metric / indicator used to track goal^

Citywide flood risk.

Comment

Sunderland City Council aims to reduce citywide flood risk annually and in the long term. The magnitude of each annual goal is typically set in relation to the possible scheme funding available and the magnitude of flood risk reduction achievable.

For the 2022/23 financial year, Sunderland City Council aims increase the flood resilience of 200 - 300 properties and roughly 420 – 630 people.

Select a reference ID for the goal

Adaptation goal 2

Adaptation goal^

Reduce vulnerability to air pollution

Climate hazards that goal addresses^

Air pollution

Base year of goal (or year goal was established if no base year)^

2,022

Target year of goal^

2022

Description of metric / indicator used to track goal^

Annual mortality attributable to air pollution / number of days where air pollution is recorded as 'low' within the city.

Comment

Sunderland City Council aims to reduce mortality due to air pollution each year. This is a common national goal through Public Health England. More information can be found at <https://fingertips.phe.org.uk/profile/health-protection/data#page/0/gid/1000002/pat/6/ati/102/are/E08000024/iid/93463/age/288/sex/4/cid/4/tbm/1>.

Select a reference ID for the goal

Adaptation goal 3

Adaptation goal^

Reduce fuel poverty due to climate change

Climate hazards that goal addresses^

Extreme cold
Snow and ice
Air pollution

Base year of goal (or year goal was established if no base year)^

2,022

Target year of goal^

2022

Description of metric / indicator used to track goal^

Annual number of residents who are fuel poor.

Comment

Sunderland City Council aims to reduce mortality due to fuel poverty each year and in the long term. This is a common national goal through Public Health England. More information can be found at <https://fingertips.phe.org.uk/profile/health-protection/data#page/0/gid/1000002/pat/6/ati/102/are/E08000024/iid/93463/age/288/sex/4/cid/4/tbm/1>.

Select a reference ID for the goal

Adaptation goal 4

Adaptation goal^

Protection of greenspace

Climate hazards that goal addresses^

Heat stress
Extreme heat
Extreme cold
Snow and ice
Urban flooding
River flooding
Extreme wind
Storm
Heavy precipitation
Loss of green space/green cover
Soil degradation/erosion
Air pollution
Biodiversity loss

Base year of goal (or year goal was established if no base year)^

2,015

Target year of goal^

2033

Description of metric / indicator used to track goal^

The main metric is city land area % that is greenspace.
Council Policy NE4 (Greenspace) aims to protect, conserve and enhance green infrastructure by:

1. designating greenspaces in the Allocations & Designations (A&D) Plan;
2. requiring development to contribute to greenspace where there is an evidenced requirement;
3. requiring all major residential development to provide:
 - i) ≥ 0.9 ha per 1,000 bedspaces of useable greenspace on site; or
 - ii) a financial contribution for the maintenance/upgrading to neighbouring existing greenspace
4. refusing development which would negatively effect greenspace value unless it can be demonstrated that:
 - i) the proposal is accompanied by an assessment that clearly demonstrates that the

- provision is surplus to requirements; or
- ii) a replacement facility which is at least equivalent in terms of usefulness, attractiveness, quality and accessibility, and where of an appropriate quantity, to existing and future users is provided on another site agreed with the council prior to development commencing; or
- iii) replacement on another site is neither practicable or possible an agreed contribution is made to the council for new provision or the improvement of existing greenspace or outdoor sport and recreation facilities and its maintenance within an appropriate distance from the site or within the site.

5. Development impact on Natura 2000 (N2K) sites must be considered case-by case. Also, Sunderland's Green Infrastructure Strategy aims to:

- Protect, Enhance and Repair Strategic GI Corridors: Ensure that the network integrity is safeguarded and enhanced, unblock existing barriers to repair connectivity.
- Address GI investments – applying the evidence base, maximising multifunctionality and greatest returns, application to funding/resources opportunities.
- Future proofing / ensuring new growth is sustainable
- Identify stakeholders and work in partnerships: establish a Sunderland GI stakeholder network, cross boundary working
- Identify delivery mechanisms and secure funding streams: planning applications, growth and development, grants, a triage approach.
- Increase awareness of GI benefits: actively marketing Sunderland's GI assets, educating and advocating GI
- Policy aims/aspirations: citywide regeneration (e.g., improving health, access, quality of life, biodiversity, climate change mitigation and adaptation).

Comment

In addition to the above, the North East Community Forest (NECF) Partnership aims to plan 500 hectares of trees by 2025, and double canopy cover in the region by 2050. The NECF was launched in February 2022 and during the first planting season for the NECF, Sunderland planted 15,830 tree and shrub plants across a 7.37-hectare land area. Across this full area, wildflower grasses were also sown. Sunderland aim to plant 10 hectares across its land area in the 2022/23 planting season.

5. Mitigation Targets

GCoM Common Reporting Framework Reporting Requirements for European Cities

(5.1) Does your jurisdiction have an active greenhouse gas emission reduction target(s) in place? If no active GHG emissions reduction target is in place, please indicate the primary reason why.

Yes, our jurisdiction has an active greenhouse gas emissions reduction target(s)

(5.1a) Provide details of your emissions reduction target(s).

Select a reference ID for the target

Target 1

Target type^

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

Yes, this target will be achieved using carbon credits and the number of credits required has been quantified

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

3.74

Year target was established

2019

Covered emissions in year target was established (metric tonnes CO2e)


1,181,987

Base year^

2015

Covered emissions in base year (metric tonnes CO2e)^

1,416,976

 UK-local-authority-ghg-emissions-2020 (4).xlsx

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2040

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

100

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

0

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO₂e)^

Projected population in target year

275,624

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)

Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO₂e)

1,188,843

Is this target the jurisdiction's most ambitious target?

Yes

Alignment with Nationally Determined Contribution

This target is more ambitious than the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government

Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration

Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government

Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)

Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration

Target is conditional on the implementation of carbon capture and storage (CCS) technology

Target is conditional on the development or scaling up of other innovative technologies

Please explain^

Our overarching science-based city-wide target suggested by the Tyndall Centre is to achieve carbon neutral status by 2040 and stay within a carbon budget of 8.2 million tonnes for the period 2020-2100 . More information can be found at <https://carbonbudget.manchester.ac.uk/reports/E08000024/print/>.

Select a reference ID for the target

Target 2

Target type[^]

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary[^]

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target[^]

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?[^]

No, this target will not use carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary[^]

Year target was established

2019

Covered emissions in year target was established (metric tonnes CO₂e)

1,181,987

Base year[^]

2015

Covered emissions in base year (metric tonnes CO₂e)[^]

1,416,976

Emissions intensity figure in base year (metric tonnes CO₂e per capita or GDP)[^]

Target year[^]

2020

Estimated business as usual emissions in target year (metric tonnes CO₂e)[^]

Percentage of emissions reduction (including offsets and carbon dioxide removal)[^]

16.1

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

1,188,842.864

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO₂e)^

Projected population in target year

277,540

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)

Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO₂e)

1,046,557

Is this target the jurisdiction's most ambitious target?

No, but it is a mid-term target for the most ambitious target

Alignment with Nationally Determined Contribution

This target is as ambitious as the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

This target is not conditional on the success of an externality or component of policy outside of direct control of jurisdiction administration

Please explain^

This is an interim base-year target suggested by the Tyndall Centre, which will keep us in-line to achieve our long-term goal of carbon neutral city status by 2040, and stay within a carbon budget of 8.2 million tonnes for the period 2020-2100. More information can be found at <https://carbonbudget.manchester.ac.uk/reports/E08000024/print/>.

Select a reference ID for the target

Target 3

Target type^

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

No, this target will not use carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2019

Covered emissions in year target was established (metric tonnes CO2e)

1,181,987

Base year^

2015

Covered emissions in base year (metric tonnes CO2e)^

1,416,976

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2025

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

61.44

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

546,385.9456

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

Projected population in target year

277,445

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)

Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

1,046,557

Is this target the jurisdiction's most ambitious target?

No, but it is a mid-term target for the most ambitious target

Alignment with Nationally Determined Contribution

This target is more ambitious than the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government

Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration

Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government

Target is conditional on additional state or regional/national legislation, regulation and/or policy

Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)

Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration

Target is conditional on the implementation of carbon capture and storage (CCS) technology

Target is conditional on the development or scaling up of other innovative technologies

Target is conditional on a reduction in emissions from air travel that is outside the direct control of jurisdiction administration

Please explain^

This is an interim base-year target suggested by the Tyndall Centre, which will keep us in-line to achieve our long-term goal of carbon neutral city status by 2040, and stay within a carbon budget of 8.2 million tonnes for the period 2020-2100. More information can be found at <https://carbonbudget.manchester.ac.uk/reports/E08000024/print/>.

Select a reference ID for the target

Target 4

Target type^

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

We do not know if this target will be achieved using carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2019

Covered emissions in year target was established (metric tonnes CO2e)

1,181,987

Base year^

2015

Covered emissions in base year (metric tonnes CO2e)^

1,416,976

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2030

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

82.28

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

251,088.1472

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

Projected population in target year

276,925

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)

Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

1,046,557

Is this target the jurisdiction's most ambitious target?

No, but it is a mid-term target for the most ambitious target

Alignment with Nationally Determined Contribution

This target is more ambitious than the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government

Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration

Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government

Target is conditional on additional state or regional/national legislation, regulation and/or policy

Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)

Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration

Target is conditional on the implementation of carbon capture and storage (CCS) technology

Target is conditional on the development or scaling up of other innovative technologies

Target is conditional on a reduction in emissions from air travel that is outside the direct control of jurisdiction administration

Please explain^

This is an interim base-year target suggested by the Tyndall Centre, which will keep us in-line to achieve our long-term goal of carbon neutral city status by 2040, and stay within a carbon budget of 8.2 million tonnes for the period 2020-2100. More information can be found at <https://carbonbudget.manchester.ac.uk/reports/E08000024/print/>.

Select a reference ID for the target

Target 5

Target type^

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

We do not know if this target will be achieved using carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2019

Covered emissions in year target was established (metric tonnes CO2e)

1,181,987

Base year^

2015

Covered emissions in base year (metric tonnes CO2e)^

1,416,976

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2035

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

91.86

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

115,341.8464

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

Projected population in target year

276,204

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)

Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

1,046,557

Is this target the jurisdiction's most ambitious target?

No, but it is a mid-term target for the most ambitious target

Alignment with Nationally Determined Contribution

This target is more ambitious than the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government

Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration

Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government

Target is conditional on additional state or regional/national legislation, regulation and/or policy

Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)

Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration

Target is conditional on the implementation of carbon capture and storage (CCS) technology

Target is conditional on the development or scaling up of other innovative technologies

Target is conditional on a reduction in emissions from air travel that is outside the direct control of jurisdiction administration

Please explain^

This is an interim base-year target suggested by the Tyndall Centre, which will keep us in-line to achieve our long-term goal of carbon neutral city status by 2040, and stay within a carbon budget of 8.2 million tonnes for the period 2020-2100. More information can be found at <https://carbonbudget.manchester.ac.uk/reports/E08000024/print/>.

(5.1b) Provide details on the current or planned use of carbon credits sold to or purchased from outside the jurisdiction or target boundary.

Type of carbon credits

Other, please specify
See comment section

Identify target

Target 1

Emissions purchased/sold (metric tonnes CO2e)

Verified to which standard

Do not know

Outline the crediting period and country(ies) where offsetting efforts are or will be taking place

Do not know.

Comment

Sunderland already benefits from some natural offsetting. In 2019, the Land Use, Land Use Change and Forestry (LULUCF) sector sequestered a net 8,694tCO₂. Sunderland City Council are currently working to implement the Green Infrastructure Strategy and the Green Infrastructure Action and Delivery Plan, in addition to a number of tree planting projects such as the North East Community Forest. This will also increase natural offsetting.

Aside this, and in line with science-based recommendations provided by the Tyndall Centre and the Council’s recent commitment to UK100 to achieve net zero GHGs, Sunderland’s priority is currently to reduce emissions at source before looking to offset or purchase carbon credits. However, it is widely acknowledged that Sunderland will have some unavoidable emissions and will look to explore the concept of carbon credits in the future.

6. Sector Targets

(6.1) Provide details of your jurisdiction's energy-related targets active in the reporting year. In addition, you can report other climate-related targets active in the reporting year.

Target type

Building specific emissions reduction target
Municipal emissions reduction target

Target description

Sunderland City Council are aiming to become net carbon neutral across scope 1 and 2 emissions by 2030. This consists of the Council's operations - including vehicle fleet and buildings within financial control.

Boundary of target relative to jurisdiction boundary

Government operations – covers only functions owned and operated by jurisdictions government

Year target was established

2,020

Base year

2017

Metric used to measure target (renewable energy or energy efficiency target)

Metric used to measure target

Tonnes CO₂e

Metric value in base year

22,778.39

Target year

2030

Metric value in target year

0

Metric value in most recent year data is available

8,545.93

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

<https://www.sunderland.gov.uk/lowcarbon>

Comment

When Sunderland City Council's Low Carbon Action Plan was adopted in January 2021, the Council went through the process of understanding its baseline position with regard to its operational and indirect carbon emissions. This baseline position can be found in the Council's most recent annual carbon data report, available at https://www.mysunderland.co.uk/media/26711/Carbon-Emissions-Report-SCC-2020-21-Final-Draft-to-Publish/pdf/Carbon_Emissions_Report_SCC_2020-21_Final_Draft_to_Publish.pdf?m=637871847892530000 . The Council is committed to producing the data report annually.

The Greenhouse Gas Protocol advises organisations to prioritise making reductions in scope 1 and 2 emissions due to a higher degree of control. The figures represented in this table represent the Council's scope 1 and 2 emissions, currently comprising of emissions from the vehicle fleet, gas consumption, and the generation of purchased electricity across the operational estate.

The Council is also going through the process of better understanding its scope 3 emissions. Based on current data availability, scope 3 emissions for the Council are estimated to have accounted for 20,061tCO₂e in 2020/21 (70% of overall emissions). The Council aims to reduce these emissions where possible, its value chain with it on its Low Carbon journey.

Target type

Renewable energy consumption target

Increase proportion of electricity consumed from renewable sources

Target description

In 2015 Sunderland City Council signed a pledge to UK100, committing to 100% clean energy by 2050.

Boundary of target relative to jurisdiction boundary

Government operations – covers only functions owned and operated by jurisdictions government

Year target was established

2,015

Base year

2015

Metric used to measure target (renewable energy or energy efficiency target)

Percentage (%)

Metric used to measure target

Percentage

Metric value in base year

Target year

2050

Metric value in target year

100

Metric value in most recent year data is available

100

Percentage of total energy that is renewable in target year

100

Is this target publicly available?

Yes, provide link/attachment

<https://www.uk100.org/100-clean-energy-2050-pledge>

Comment

Sunderland City Council's electricity now comes from 100% nuclear sources.

Target type

Energy efficiency targets

Increase energy efficiency of buildings (residential buildings)

Target description

Riverside Sunderland domestic energy targets

Boundary of target relative to jurisdiction boundary

Smaller - covers only part of the jurisdiction, please explain exclusions
Covers the Riverside Sunderland urban quarter only.

Year target was established

2,020

Base year

2020

Metric used to measure target (renewable energy or energy efficiency target)

Other, please specify
Several metrics listed in comment column

Metric used to measure target

Several metrics listed in comment column

Metric value in base year

Target year

2030

Metric value in target year

Metric value in most recent year data is available

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment
<https://www.riversidesunderland.com/>

Comment

Reducing energy consumption and using clean energy is a key aspect of the Riverside Sunderland Masterplan. A range of targets for both domestic and non-domestic buildings are set out for both 2025 and 2030 to reduce operational energy, reduce space heating demand, increase renewable generation on roofs, reduce embodied carbon, and decrease portable water use

For domestic property the targets from 2020 - 2030 are:

- Reduce operational energy from 105kWh/m²/y in 2020 to ≤ 35kWh/m²/y.
- Reduce space heating demand from 15 – 20kWh/m²y to 15kWh/m²/y.
- Achieve peak heat loss of 10W/m².
- Use 70% of small scale housing roofs for renewable energy generation.
- Reduce embodied carbon from 600kgCO₂e/m² to 300kgCO₂e/m².
- Reduce portable water use from 110l/p/d to 75l/p/d.

Target type

Energy efficiency targets

Increase energy efficiency of buildings (government-owned buildings)

Target description

Riverside Sunderland non-domestic energy targets.

Boundary of target relative to jurisdiction boundary

Smaller - covers only part of the jurisdiction, please explain exclusions

Covers the Riverside Sunderland urban quarter only.

Year target was established

2,020

Base year

2020

Metric used to measure target (renewable energy or energy efficiency target)

Other, please specify

Several metrics listed in target description column

Metric used to measure target

Several metrics listed in comment column

Metric value in base year

Target year

2030

Metric value in target year

Metric value in most recent year data is available

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

<https://www.riversidesunderland.com/>

Comment

Reducing energy consumption and using clean energy is a key aspect of the Riverside Sunderland Masterplan. A range of targets for both domestic and non-domestic buildings are set out for both 2025 and 2030 to reduce operational energy, reduce

space heating demand, increase renewable generation on roofs, reduce embodied carbon, and decrease portable water use.

For non-domestic property the targets from 2020 – 2030 are:

- Reduce operational energy from 170kWh/m²/y in 2020 to 0-55kWh/m²/y in 2030.
- Reduce space heating demand from 15-20kWh/m²/y in 2020 to 15kWh/m²/y in 2030.
- Achieve peak heat loss of 10W/m².
- Using renewable sources, generate the annual energy requirement for at least 2 floors of developments on-site.
- Reduce embodied carbon from 800kgCO₂e/m² in 2020 to 500kg/CO₂e/m² in 2030.
- Reduce portable water use from 16l/p/d in 2020 to 10l/p/d in 2030.

Target type

Energy efficiency targets
Increase energy efficiency of buildings (residential buildings)

Target description

Energy efficiency – EPC ratings of new tenancies

Boundary of target relative to jurisdiction boundary

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
National target

Year target was established

2,025

Base year

2025

Metric used to measure target (renewable energy or energy efficiency target)

Other, please specify
EPC ratings

Metric used to measure target

Metric value in base year

Target year

Metric value in target year

Metric value in most recent year data is available

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

<https://publications.parliament.uk/pa/bills/cbill/58-02/0150/210150.pdf>

Comment

National regulations will change in the UK to mean all new tenancies must have an energy performance certificate (EPC) rating of at least Band C from 31 December 2025. For existing tenancies, this will apply from 31 December 2028.

Target type

Waste target

Target to increase the total waste generated that is recycled

Target description

As part of the South Tyne and Wear Waste Management Partnership's (STWWMP) Joint Municipal Waste Management Strategy, Sunderland aim to increase household recycling rates to 55% by 2025, 60% by 2030 and 65% by 2035.

Boundary of target relative to jurisdiction boundary

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
STWWMP target informed by national target

Year target was established

2,021

Base year

2018

Metric used to measure target (renewable energy or energy efficiency target)

Metric used to measure target

Percentage (%)

Metric value in base year

31

Target year

2035

Metric value in target year

65

Metric value in most recent year data is available

29

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

<https://www.sunderland.gov.uk/media/23945/Waste-Management-Strategy-2021-25/pdf/STWWPWasteManagementStrategy202125.pdf?m=637859771360670000>

Comment

In June 2018, the European Commission published the 'Circular Economy Package' (CEP) revisions to the Waste Framework Directive, which sets out requirements for Member States and includes revised the stated overall recycling targets for municipal waste.

Achieving these targets will be challenging for many local authorities. The UK government has retained the principles of the EU Framework following the EU exit, which means that across the UK, recycling rates will need to improve significantly in the years to come.

Target type

AFOLU target
Target to increase reforestation

Target description

One of the main goals of the North East Community Forest is to double tree canopy cover in the Tyne & Wear and County Durham.

Boundary of target relative to jurisdiction boundary

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
County Durham, Gateshead, Newcastle-upon-Tyne, North Tyneside, Sunderland and South Tyneside

Year target was established

2,021

Base year

2021

Metric used to measure target (renewable energy or energy efficiency target)

Metric used to measure target

Woodland Cover (%)

Metric value in base year

18.4

Target year

2050

Metric value in target year

30

Metric value in most recent year data is available

18.4

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

<https://www.newcastle.gov.uk/northeastcommunityforest>

Comment

The area of woodland in the UK on the 31 March 2020 was estimated to be 3.21 million hectares. This represents 13% of the total land area in the UK, 10% in England, 15% in Wales, 19% in Scotland and 9% in Northern Ireland. Looking abroad, France, Germany and Spain include woodland cover of 31%, 33% and 37% respectively. England's woodland cover is only just over a quarter of that enjoyed, on average, across the rest of Europe.

The North East has a land area of 843,400 hectares making it 8th out of 14 aligned areas by land area. With 116,130 hectares of woodland, the North East ranks 4th of 14 in terms of woodland area (14% woodland cover). However, across the NECF area woodland cover is just 8.3%.

The Independent Committee on Climate Change (IPCC) advises the UK government to significantly increase its overall woodland cover from 13% to 17% by 2050, and ideally, 19% to support the transition to net zero. The North East Community Forest Partnership aim to double tree canopy cover, and plant 500 hectares, by 2025.

Sunderland carried out an i-tree canopy cover assessment in 2021 and the Sunderland city total canopy cover is 18.40%. The NECF target for 2050 is to achieve 30% tree canopy cover across the entire forest area. 7 hectares were planted through the NECF in Sunderland by June 2022.

Target type

Transport target

Modal share targets

Target description

Through the North East Bus Service Improvement Plan (BSIP), Sunderland along with other partners of the North East Joint Transport Committee aim to increase the modal share for buses. We aim to repair the damage caused by Covid-19 to bus ridership in the region by returning to the pre-pandemic level of 162.4 million trips by March 2023.

After this we aim to target 10% growth on a 2019 baseline by March 2024 and a further 10% growth by March 2025. We also aim to increase the modal share of buses by 1% by March 2024, and another 1% by March 2025.

In addition to increasing modal share of buses, the North East Joint Transport Committee wish to increase rail travel through the North East Metro and Rail Strategy. Sunderland City Council also wish to increase walking and cycling modal share through its Local Cycling and Walking Infrastructure Plan in addition to the use of electric vehicles through its upcoming Electric Vehicle Strategy.

Boundary of target relative to jurisdiction boundary

Larger - covers the whole jurisdiction and adjoining areas, please explain additions
Covers Sunderland, Newcastle, Gateshead, South Tyneside, North Tyneside, Northumberland and County Durham

Year target was established

2,022

Base year

2019

Metric used to measure target (renewable energy or energy efficiency target)

Metric used to measure target

%

Metric value in base year

6.4

Target year

2025

Metric value in target year

8.4

Metric value in most recent year data is available

6.4

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

https://www.transportnortheast.gov.uk/wp-content/uploads/2021/10/TNE-BSIP_FINAL.pdf

Comment

Planning

7. Planning

Climate Action Planning

(7.1) Does your jurisdiction have a climate action plan or strategy?

Yes, our jurisdiction has a climate action plan or strategy

(7.1a) Report details on the climate action plan or strategy that addresses climate mitigation and/or climate adaptation (resilience) in your jurisdiction.

Climate action plan type^

Standalone climate mitigation plan

Attachment/link and name of plan^

https://www.sunderland.gov.uk/media/22959/Sunderland-Low-Carbon-Framework/pdf/Sunderland_Low_Carbon_Framework1.pdf?m=637461416504170000

 Sunderland_Low_Carbon_Framework1.pdf

Confirm attachment/link provided to plan

The plan has been attached and can be accessed (unrestricted) on the link provided

Boundary of plan relative to jurisdiction boundary^

Same (jurisdiction-wide) covers entire jurisdiction and nothing else

Processes for monitoring evaluation and updates of plan^

Monitoring: Information on progress of plan is monitored and publicly reported annually

Evaluation: Evaluation of plan takes place annually

Update: Updates to the plan are published at least every 3 years

Funding sources and financial instruments to finance plan

Jurisdiction's own resources

Regional funds and programmes

National funds and programmes

International (including ODA)

Public-private partnerships

Stakeholders engaged^

Local government (s) and/or agencies

Citizens

Vulnerable population groups

Business and private sector

Non-governmental organisations

Describe if and how climate-related scenarios have informed the plan

A report from the Tyndall Centre, available at <https://carbonbudget.manchester.ac.uk/reports/E08000024/print/>, presents climate mitigation targets for Sunderland that are derived from the commitments of the Paris Agreement, informed by science-based climate change evidence. The report provides Sunderland with budgets for carbon dioxide emissions and from the energy system for 2020 to 2100. For Sunderland to make its fair contribution towards the Paris Agreement, the following recommendations should be adopted:

- Stay within a maximum cumulative CO₂ emissions budget of 8.2 million tonnes (MtCO₂) for the period of 2020 to 2100. At 2017 CO₂ emission levels, Sunderland would use this entire budget within 6 years from 2020.
- Initiate an immediate programme of CO₂ mitigation to deliver cuts in emissions averaging a minimum of -14.4% per year to deliver a Paris aligned carbon budget. These annual reductions in emissions require national and local action and could be part of a wider collaboration with other local authorities.
- Reach zero or near zero carbon no later than 2040. The report provides an indicative CO₂ reduction pathway that stays within the recommended maximum carbon budget of 8.2 MtCO₂. In 2040 5% of the budget remains, representing very low levels of residual CO₂ emissions by this time. Earlier years for reaching zero CO₂ emissions are also within the recommended budget, provided that interim budgets with lower cumulative CO₂ emissions are also adopted.

Recent local extreme weather events also inform climate action in Sunderland. For example, Storm Arwen brought high winds, heavy rain and snow to Sunderland in November 2021. Homes, businesses and green infrastructure were damaged and public transport networks were suspended. There were 600 reports of storm damage and more than 85 fallen trees.

- Houses were damaged at Gloucester Avenue, Fulwell and Benedict Road, Roker, Sea Road, Hendon and South Hylton.
 - A tree blocked the A690 Durham Road at Bede Bank and another blocked Chester Road near the cemetery.
 - Structural damage to 28 properties, mainly involving walls and gable ends.
 - 240,000 were left without electricity.
 - Tyne and Wear Fire and Rescue Service took more than 500 weather related calls in 24 hours.
 - Gentoo housing group faced costs of storm damages up to £2 million.
- With extreme weather events likely to become more frequent and intense in the future, this increases the importance of climate action.

Primary author(s) of plan^

Dedicated team within jurisdiction

Assessment of co-benefits, trade-offs, and synergies of actions included in plan^

Plan assesses co-benefits of actions

Plan assesses trade-offs of actions

Plan assesses synergies of actions

Year of formal approval of plan^

2020

End year of plan

2,040

Total cost of implementation of plan (in currency specified in 0.1)

Sectors covered by action plan

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Water supply
Waste management
Conservation
Construction
Transportation and storage
Education

Comment

The Low Carbon Framework sets out the vision, purpose and directions of actions necessary to enable the city to deliver on Sunderland's carbon neutrality goals. The Low Carbon Framework was adopted in December 2020 by the City partnership Board, on the recommendation of the 2030 Shadow Board, and subsequently endorsed by Sunderland City Council's Cabinet in 2021.

Climate action plan type^

Standalone adaptation plan

Attachment/link and name of plan^

Sunderland Local Flood Risk Management Strategy (available at https://www.sunderland.gov.uk/media/23162/Local-flood-risk-management-strategy/pdf/Sunderland_LFRMS_-_Final_Version_-_Complete.pdf?m=637502096317830000)

 Sunderland_LFRMS_-_Final_Version_-_Complete (1).pdf

Confirm attachment/link provided to plan

The plan has been attached and can be accessed (unrestricted) on the link provided

Boundary of plan relative to jurisdiction boundary^

Same (jurisdiction-wide) covers entire jurisdiction and nothing else

Processes for monitoring evaluation and updates of plan^

Monitoring: Information on progress of plan is monitored and publicly reported annually

Evaluation: Evaluation of plan takes place annually

Update: Updates to the plan are published at least every 5 years

Funding sources and financial instruments to finance plan

Jurisdiction's own resources

Stakeholders engaged^

Local government (s) and/or agencies

Citizens

Vulnerable population groups

Business and private sector

Non-governmental organisations

Describe if and how climate-related scenarios have informed the plan

Flooding is the most significant climate hazard in Sunderland with coastal, river and urban flooding all being hazards to residents and the economy as identified in the climate risk and vulnerability module. Furthermore, it is expected that the frequency and intensity of flooding events in the jurisdiction will increase in the event of 1.5°C global warming being exceeded.

Sunderland prepares a Local Flood Risk Management Strategy every 5-6 years, with the most recent one being published in 2016 and the next due to be published later in 2022.

The purpose of the LFRMS is to act as a robust guidance tool for Risk Management Authorities operating in Sunderland to deliver a coordinated, improved approach in all flood risk management activities. In addition, the overriding vision for the LFRMS is for Sunderland City Council to take a lead role in better understanding local flood risk. Providing this information in the form of the LFRMS will enable communities to also improve their own knowledge and understanding of the risk of flooding across Sunderland.

More information can be found at https://www.sunderland.gov.uk/media/23162/Local-flood-risk-management-strategy/pdf/Sunderland_LFRMS_-_Final_Version_-_Complete.pdf?m=637502096317830000

Primary author(s) of plan^

Dedicated team within jurisdiction

Assessment of co-benefits, trade-offs, and synergies of actions included in plan^

Plan assesses co-benefits of actions

Plan assesses trade-offs of actions

Plan assesses synergies of actions

Year of formal approval of plan^

2016

End year of plan

Total cost of implementation of plan (in currency specified in 0.1)

Sectors covered by action plan

Agriculture
Forestry
Water supply
Sewerage, wastewater management and remediation activities
Construction
Education
Human health and social work activities
Other, please specify
public health; spatial planning; water; business; social services

Comment

Climate action plan type^

Standalone adaptation plan

Attachment/link and name of plan^

Sunderland Green Infrastructure Strategy, available at
[https://www.sunderland.gov.uk/media/20889/SD-46-Sunderland-Green-Infrastructure-Strategy-2018-
/pdf/SD.46_Sunderland_Green_Infrastructure_Strategy_\(2018\).pdf?m=636802959791130000](https://www.sunderland.gov.uk/media/20889/SD-46-Sunderland-Green-Infrastructure-Strategy-2018-/pdf/SD.46_Sunderland_Green_Infrastructure_Strategy_(2018).pdf?m=636802959791130000) and Sunderland Green Infrastructure Delivery and Action Plan, available at
https://www.sunderland.gov.uk/media/21396/EX1-017-Sunderland-Green-Infrastructure-Delivery-and-Action-Plan/pdf/EX1.017_Sunderland_Green_Infrastructure_-_Delivery_and_Action_Plan.pdf?m=636918745551330000
 EX1.017_Sunderland_Green_Infrastructure_-_Delivery_and_Action_Plan.pdf
 Sunderland Green Infrastructure Strategy 2018.pdf

Confirm attachment/link provided to plan

The plan has been attached and can be accessed (unrestricted) on the link provided

Boundary of plan relative to jurisdiction boundary^

Same (jurisdiction-wide) covers entire jurisdiction and nothing else

Processes for monitoring evaluation and updates of plan^

Monitoring: Information on progress of plan is monitored and publicly reported annually
Evaluation: Evaluation of plan takes place annually
Update: Updates to the plan are published annually

Funding sources and financial instruments to finance plan

Jurisdiction's own resources

Stakeholders engaged^

National government and/or agencies
Local government (s) and/or agencies
Citizens
Vulnerable population groups
Business and private sector
Non-governmental organisations

Describe if and how climate-related scenarios have informed the plan

Flooding, extreme heat and biodiversity loss are all likely to increase in frequency and intensity in the future. These increasing risks have increased the need for the provision of Green Infrastructure across Sunderland – in relation to climate change mitigation (offsetting) and climate change adaptation.

The Green Infrastructure Strategy aims to:

- Protect, Enhance and Repair the Strategic GI Corridors: Ensure that the integrity of the network is safeguarded and enhanced, unblock existing barriers to repair connectivity.
- Address GI investments – applying the evidence base, maximizing multifunctionality and greatest returns, application to funding/resources opportunities.
- Future proofing / ensuring new growth is sustainable
- Identify key stakeholders and promote partnership working: establish a Sunderland GI stakeholder network, cross boundary working
- Identify delivery mechanisms and secure funding streams: planning applications, growth and development, grants, a triage approach.
- Increase awareness of Sunderland's GI value and benefits: actively marketing Sunderland's GI assets, educating and advocating GI
- Policy aims and aspirations: regeneration across the city, such as improving health, access, quality of life, biodiversity, climate change mitigation (offsetting) and climate change adaptation.

To translate SGIS into a series of projects for delivery and action over the next 15 years, from 2018-2033, Sunderland has a Green Infrastructure Delivery and Action Plan. This sets out a range of actions, some of which include the development of a 'Green Infrastructure Offsetting Matrix', creating filter strips and natural swales, permeable paving, wetlands and woodlands wherever feasible to help cope with flash flooding, repairing broken corridors, creating reed beds at stream sources to slow down flash flooding, increasing woodland cover, and creating buffer zones to protected wildlife sites.

SGIS and Sunderland's Green Infrastructure Delivery and Action Plan help Sunderland mitigate and adapt to climate risk through nature-based solutions by: storing carbon; improving drainage and managing flooding; improving water quality; supporting adaptive management in coastal infrastructure; reducing air pollution; and increasing shading cover.

Green Infrastructure improvements proposed also seek to improve the cycle network across the city and access to local facilities on foot, thereby promoting and encouraging a modal shift to active transport.

Primary author(s) of plan^

Dedicated team within jurisdiction

Assessment of co-benefits, trade-offs, and synergies of actions included in plan^

Plan assesses co-benefits of actions

Plan assesses trade-offs of actions

Plan assesses synergies of actions

Year of formal approval of plan^

2018

End year of plan

2,033

Total cost of implementation of plan (in currency specified in 0.1)

Sectors covered by action plan

Agriculture

Forestry

Water supply

Construction

Education

Human health and social work activities

Other, please specify

public health; spatial planning; social services; any sector which requires planning permissions.

Comment

Sector Action Planning

(7.2) Report details on the other climate-related plans, policies and/or strategies in your jurisdiction.

Area of plan and/or strategy

Other, please specify

Sunderland City Plan

Attachment/ link and name of plan

Sunderland City Plan, available at

https://www.sunderland.gov.uk/media/21728/City-Plan-Sunderland-2019-2030/pdf/oce21555_Council_Strategy_2030_Reformed_Presentation_v2.pdf?m=637569323260530000

 oce21555_Council_Strategy_2030_Reformed_Presentation_v3_Hi-Res.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,019

End of year plan

2,030

Comment

The Sunderland City Plan was updated in April 2022 and lists global warming and climate change as a key challenge, and consequently, one of the central commitments is that Sunderland will play its role in tackling climate change, working together across the city to be carbon neutral by 2040.

The City Plan has three central themes: a Dynamic Smart City; A Healthy Smart City and; a Vibrant Smart City. There is a set of commitments under each theme, a number of which successful climate change mitigation and adaptation can contribute towards.

Regarding a Dynamic Smart City, the objective is that by 2030, Sunderland will be a lower carbon city with greater digital connectivity for all, with more and better jobs, more local people with better qualifications and skills, a stronger city centre with more businesses, housing and cultural opportunities, and more and better housing.

Regarding a Healthy Smart City, the objective is that by 2030, Sunderland will have reduced health inequalities enabling more people to live healthier longer lives, access to equitable opportunities and life chance, people enjoying independent lives, great transport links with low carbon and active travel opportunities for all, and a cleaner and more attractive city and neighbourhoods.


Regarding a Vibrant Smart City, the objective is that by 2030, Sunderland will have more resilient people, more people feeling safe in their homes and neighbourhoods, more residents participating in their communities and more people visiting Sunderland and more residents informing and participating in cultural events, programmes and activities.

Area of plan and/or strategy

Spatial development

Attachment/ link and name of plan

Sunderland Core Strategy and Development Plan (CSDP), available at <https://www.sunderland.gov.uk/CSDP>

 CSDP_2015-2033.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,015

End of year plan

2,033

Comment

The CSDP (part 1 of Sunderland’s Local Plan) sets out citywide development plans to 2033 and has numerous policies that reflect Sunderland’s environmental sustainability ambitions.

The CSDP has a spatial vision that Sunderland will be at the heart of a low carbon regional economy. Policy WWE1 ensures that the development of decentralised, renewable, and low carbon energy will be supported. Policy BH1 requires development to achieve high-quality design standards and maximise opportunities to create sustainable mixed-use developments and for the use of sunlight / solar energy. Policy BH2 requires the incorporation of sustainable design and construction methods, maximising efficient and clean energy.

Regarding adaptation, Policies WWE2 and WWE3 aim to reduce flood risk and implement sustainable coastal management. Policy NE1 also states development should apply climate change mitigation and adaptation measures, including flood and watercourse management.

Policy WWE4 aims to enhance water security, by requiring the quantity and quality of water bodies and bathing water to be protected, and where possible enhanced. Policy WWE4 also requires developments that discharge into a watercourse to incorporate pollution control measures, and developments which run adjacent to, over or in a watercourse to consider opportunities to improve river environments and water quality where applicable.

Regarding waste, Policy WWE6 requires development to support waste minimisation, re-use and recovery.

The CSDP has a vision that Sunderland will have a high-quality natural environment and green infrastructure network. Policy BH2 requires major development to include opportunities to enhance biodiversity. Policy NE1 seeks to protect the environment by maintaining and improving green and blue infrastructure. Policy NE2 ensures that, where appropriate, development must demonstrate how it will provide biodiversity net gain and minimise adverse impacts on biodiversity in accordance with the mitigation hierarchy. Policy NE2 also aims to safeguard SSSIs, local wildlife sites, wildlife corridors and local nature reserves. Policy NE3 requires development to provide biodiversity net

gain through woodlands, hedgerows and trees. Finally, Policy WWE4 ensures that development close to or in a main river or ordinary watercourse should consider opportunities to improve the river environment and water quality by improving the biodiversity and ecological connectivity of the watercourse.

Area of plan and/or strategy

Spatial development

Attachment/ link and name of plan

Allocations and Designations Plan
available at https://www.sunderland.gov.uk/media/22878/AD-01-Allocations-and-Designations-Plan-2020/pdf/AD.01_Allocations_and_Designations_Plan_20201.pdf?m=637435558267800000),

 AD.01_Allocations_and_Designations_Plan_20201.pdf

Current status of plan

Plan update in progress

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,020

End of year plan

Comment

The A&D Plan forms the final part of the Sunderland Local Plan. It contains a range of allocations and designations covering housing, retail, heritage, the natural environment, transport, wind energy and minerals, to help to deliver on the strategic priorities from the CSDP.

To support the overall development strategy set out in the CSDP, the A&D Plan proposes to:

- allocate 58 sites for residential development including a strategic allocation at Riverside Sunderland
- focus regeneration and new development at North East Washington (including aims to regenerate Sulgrave, create a new sustainable residential community at Washington Meadows and work to reopen the Leamside Line).
- allocate the former Houghton Colliery site as a development opportunity and extension to Houghton Town Centre;
- designate heritage assets;


- protect the natural environment by designating areas for protection and enhancement;
- identify land suitable for wind energy development to support a move towards a low carbon future;
- safeguard land for the future expansion of the Metro network, including potential park and ride locations; and
- safeguard Eppleton Quarry to ensure a steady supply of minerals throughout the plan period.

Area of plan and/or strategy

Other, please specify
IAMP Area Action Plan

Attachment/ link and name of plan

IAMP Area Action Plan
available at <https://www.sunderland.gov.uk/article/12757/International-Advanced-Manufacturing-Park>

 International_Advanced_Manufacturing_Park_(IAMP)_Area_Action_Plan_2017-2032_-_Nov_2017.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Partial – covers part of the jurisdiction and adjoining areas, please explain
Covers part of Sunderland and part of South Tyneside

Year of formal approval of plan

2,017

End of year plan

2,032

Comment

The International Advanced Manufacturing Park (IAMP) Area Action Plan 2017-2032, which is part of the Local Plan and provides the planning policy context for the development of a 370-acre enterprise zone specialising in the development of automotive and advanced manufacturing sectors, forms the third part of the Local Plan.

Primary aims of IAMP include:

- Building on the area's international reputation in the automotive industries and support Nissan in its expansion and investment in the UK.
- Enabling the North East to continue to achieve a positive balance of trade in goods, thereby strongly supporting the growth and resilience of the UK economy.
- Delivering a key element of the City Deal with Government and to support the NELEP to stimulate local jobs and growth in the local economy.

- Attracting European-scale 'super suppliers', especially linked to automotive industries and encourage investment and expansion by existing businesses.
- Ensuring the North East has sufficient land to meet the demand of growth employment sectors, in the most appropriate locations to attract private sector investment.
- Ensuring links to sub-regional infrastructure, including ports, roads and airports.
- Ensuring a suitable transport network to realise the vision.
- Ensuring access to a skilled workforce to realise the vision.
- Protecting and enhance biodiversity through on- and off-site mitigation.
- Encouraging design and development based on sound sustainability principles.
- Creating a central hub to provide identity and encourage public transport.
- Maximising opportunities to bring in public sector and private sector funding.
- Improving flood alleviation, water quality and habitat connectivity along the River Don.

Area of plan and/or strategy


Other, please specify

Sunderland City Council Low Carbon Action Plan

Attachment/ link and name of plan

Sunderland City Council Low Carbon Action Plan, available at

<https://committees.sunderland.gov.uk/committees/CMIS5/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShgo=4vUxQHuhLCfa754Og%2bWTgL41DzgOrRSMvUHir3%2b1SKL40Gxbp4rczw%3d%3d&rUzwRPf%2bZ3zd4E7Ikn8Lyw%3d%3d=pwRE6AGJFLDNih225F5QMaQWCtPHwdhUfCZ%2fLUQzgA2uL5jNRG4jdQ%3d%3d&mCTIbCubSFfXsDGW9IXnlg%3d%3d=hFfIUdN3100%3d&kCx1AnS9%2fpWZQ40DXFvdEw%3d%3d=hFfIUdN3100%3d&uJovDxwdjMPoYv%2bAJvYtyA%3d%3d=ctNJFf55vVA%3d&FgPIIEJYlotS%2bYGoBi5oIA%3d%3d=NHdURQburHA%3d&d9Qjj0ag1Pd993jsyOJqFvmyB7X0CSQK=ctNJFf55vVA%3d&WGewmoAfeNR9xqBux0r1Q8Za60lavYmz=ctNJFf55vVA%3d&WGewmoAfeNQ16B2MHuCPMRKZMwaG1PaO=ctNJFf55vVA%3d>

 12-01-Appendix 1 Low Carbon Action Plan Refresh 2022.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Partial – covers part of the jurisdiction and adjoining areas, please explain

City Council activity only

Year of formal approval of plan

2,020

End of year plan

2,030

Comment

The Low Carbon Action Plan has been prepared to align to the Sunderland Low Carbon Framework. It sets out how the Council will reduce its carbon impact and meet the

strategic objectives in the Framework.

This Action Plan sets out the numerous actions across each of the seven strategic priorities, for the Council to help the delivery of its 2030 carbon neutral target, as well as contributing to the citywide 2040 carbon neutral goal. The Action Plan, like the Low Carbon Framework, has seven strategic priorities: Our Behaviour, Our Policies and Operational Practices, An Energy Efficient Built Environment, Renewable Energy Generation and Storage, Low Carbon and Active Transport, A Green Economy and Consumption and Waste. Within each strategic priority, a number of objectives and individual actions are set out and will continue to be brought forward.

There will be opportunities for the ongoing development and implementation of the Council's Low Carbon Action Plan to support delivery of the wider City Plan as well as to support delivery of individual strategies, such as the Community Wealth Building Strategy and other initiatives aligned to the Council's wider objectives as a Co-operative Council.

The Council has recently developed a more robust version of its Low Carbon Action Plan which was approved by Cabinet in July 2022 and 2030 Shadow Board Partners are also drafting their own Action Plans to align with the citywide Low Carbon Framework

Area of plan and/or strategy

Spatial development

Attachment/ link and name of plan

Riverside Sunderland Masterplan and Supplementary Planning Document
Masterplan - https://www.riversidesunderland.com/sites/default/files/2020-10/sunderland_masterplan_relaunch_RevU_spreads.pdf
Supplementary Planning Document - available at
https://www.sunderland.gov.uk/media/22904/Riverside-Sunderland-SPD/pdf/Riverside_Sunderland_SPD.pdf?m=637437352115230000

 [sunderland_masterplan_relaunch_RevU_spreads.pdf](#)

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Smaller – covers only part of the jurisdiction, please explain
Covers an area of the Urban Core.

Year of formal approval of plan

2,020

End of year plan

2,035

Comment

Riverside Sunderland is a new urban quarter being developed in Sunderland city centre. The Riverside Sunderland Masterplan has the ambition of developing Riverside Sunderland into one of the UK's first carbon-neutral neighbourhoods. Key goals of the Riverside Sunderland low emissions approach are to design for low energy consumption; maximise opportunities for heat recovery; integrate Riverside Sunderland into a city-wide low-carbon heating network; generate energy from renewable sources; reduce car dependency and use modern methods of construction (MMC).

A Supplementary Planning Document was adopted by the Council in December 2020 which provides planning guidance for the delivery of the site.

Regarding climate change mitigation, reducing energy consumption and using clean energy is a key aspect of the Riverside Sunderland Masterplan. A range of targets for both domestic and non-domestic buildings are set out for both 2025 and 2030 to reduce operational energy, reduce space heating demand, increase renewable generation on roofs, reduce embodied carbon, and decrease portable water use. For example, the Riverside Sunderland project aims to reduce the operational energy consumption in domestic buildings to 70 kWh/m²/y by 2025, and to 0-35 kWh/m²/y by 2030.

Regarding climate change adaptation, the Riverside Sunderland SPD requires development to incorporate SuDS as integral features to the green infrastructure and street layout, to act as positive features to the development and help to reduce flood risk. Development is also required to ensure that surface water run-off levels are in accordance with council standards. The Riverside Sunderland Masterplan also ensures that tree planting and sustainable urban drainage will promote climate change resilience.

The Riverside Sunderland Masterplan is guided by principles of integrated sustainability and consequently, Riverside Sunderland aims to support a circular economy by using efficient designs, sustainable materials, and nature-based solutions, as well as working with the landscape to implement sustainable urban drainage.

Area of plan and/or strategy

Spatial development

Attachment/ link and name of plan

South Sunderland Growth Area SPD

https://www.sunderland.gov.uk/media/22413/SSGA-SPD-June-2020/pdf/SSGA_SPD_-_June_2020.pdf?m=637279202064570000

 35_SSGA_Infrastructure_Delivery_Study_(2017).pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Smaller – covers only part of the jurisdiction, please explain
Covers areas of land in south Sunderland.

Year of formal approval of plan

2,020

End of year plan

2,033

Comment

The South Sunderland Growth Area Supplementary Planning Document (SSGA SPD) recognises that Sunderland has an important part to play in tackling climate change and contributing to the national target of carbon neutrality by 2050.

Achievement of many of the central objectives within the SSGA SPD coincide with the successful mitigation and adaptation of climate change in Sunderland. The six core objectives are:

- To create a high quality built environment which makes the most of existing topography, landscape features, water courses, wildlife habitats, site orientation and microclimate.
- To create a new community with distinct architectural and landscape features which give the place a unique sense of character.
- To deliver high quality executive housing and wider housing choices.
- Provide new facilities including a neighbourhood centre, local parades, primary school and open space where the greatest number of new and existing residents can access them easily and safely.
- To create development which integrates with the existing community and is well connected to the surrounding area and facilities by road, footpath, cycle route and public transport link.
- To deliver a sustainable community that cares for the city's environment, makes efficient use of natural resources and mitigates against climate change.

Area of plan and/or strategy

Other, please specify
Neighbourhood Investment

Attachment/ link and name of plan

Sunderland Neighbourhood Investment Plans
<https://www.sunderland.gov.uk/Neighbourhood-Investment-Plans>

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Smaller – covers only part of the jurisdiction, please explain

Sunderland has five Neighbourhood Investment Plans for the five areas of the city.

Year of formal approval of plan

2,020

End of year plan

2,023

Comment

Sunderland's five Neighbourhood Investment Plans, which cover the five areas of the city - North, East and West Sunderland, Coalfields and Washington - aim to incorporate climate resilience through the prioritisation of tree and shrub planting programmes, improvement of drainage systems, reviewing of transport routes, reducing carbon footprint, creating green solutions, implementing traffic calming and investing in active travel infrastructure.


Area of plan and/or strategy

Deforestation, forest degradation and/or forest restoration

Attachment/ link and name of plan

North East Community Forest (Future)

<https://www.newcastle.gov.uk/northeastcommunityforest>

 North East Community Forest Bid 26.02 Compressed (2).pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain

Sunderland, South Tyneside, North Tyneside, County Durham, Newcastle-upon-Tyne, Gateshead

Year of formal approval of plan

2,021

End of year plan

2,025

Comment

Sunderland, along with neighbouring Local Authorities Newcastle-upon-Tyne, North Tyneside, South Tyneside, Durham and Gateshead recently formed the North East Community Forest Partnership. Over 4 years, 500ha of trees and woodlands will be created, as well as protecting and enhancing our existing tree stock and woodlands. It is expected that the Forest Plan will be completed and published by March 2023. The North East Community Forest is discussed further in question 9.1.


Area of plan and/or strategy

Green infrastructure

Attachment/ link and name of plan

Sunderland Green Infrastructure Strategy, available at
[https://www.sunderland.gov.uk/media/20889/SD-46-Sunderland-Green-Infrastructure-Strategy-2018-
/pdf/SD.46_Sunderland_Green_Infrastructure_Strategy_\(2018\).pdf?m=636802959791130000](https://www.sunderland.gov.uk/media/20889/SD-46-Sunderland-Green-Infrastructure-Strategy-2018-/pdf/SD.46_Sunderland_Green_Infrastructure_Strategy_(2018).pdf?m=636802959791130000)

Sunderland Green Infrastructure Delivery and Action Plan, available at
https://www.sunderland.gov.uk/media/21396/EX1-017-Sunderland-Green-Infrastructure-Delivery-and-Action-Plan/pdf/EX1.017_Sunderland_Green_Infrastructure_-_Delivery_and_Action_Plan.pdf?m=636918745551330000

 EX1.017_Sunderland_Green_Infrastructure_-_Delivery_and_Action_Plan.pdf

 Sunderland Green Infrastructure Strategy 2018.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,018

End of year plan

2,033

Comment

The Green Infrastructure Strategy was commissioned by Sunderland City Council to inform and support Sunderland's Core Strategy and Development Plan (CSDP) 2015-2033. It builds upon a wealth of work already conducted by the Council, in assessing the quality and quantity of greenspace provision in local neighbourhoods across the city and identifying a set of district and inter- district Green Infrastructure Corridors.

The importance of these Corridors in protecting and enhancing the existing GI assets that provide multiple benefits to people and wildlife across Sunderland is highlighted in this study. They define our settlements, whilst providing a connected landscape within which biodiversity, natural processes and ecosystem services can function. The natural capital we derive from these functions will become increasingly important to support sustainable growth alongside climate change and population expansion.

This study also builds upon the Council's Greenspace Audit and utilises a range of wider socioeconomic and environmental indicators, relevant to the NPPFs objectives, in order to map where there is greatest area-based need for the public benefits that GI brings.

The evidence base is then combined in order to highlight where there is greatest potential for economic, social, environmental and multi-functional outcomes from green infrastructure interventions. The resulting maps provide an overview of where enhancements to promote GI could deliver the greatest benefits for wildlife and people.

The study recognises that certain indicators require further refinement and that the mapping outputs must be considered only as an aid to strategic planning. Local knowledge and conditions; political and community values; ownership, partnerships, access and stewardship are all amongst further factors which must be considered and brought to bear in order to sustainably enhance and connect GI appropriately across the City.

Finally, a set of priorities is defined for GI delivery in Sunderland with a summary of recommended next steps to take the strategy forward. This includes the production of a Delivery and Action Plan, to identify projects, resources and partners, overcome barriers, and deliver the Council's aspirations for green infrastructure on the ground.

Area of plan and/or strategy

Biodiversity

Attachment/ link and name of plan

Biodiversity SPD (link not available yet - future plan)

Current status of plan

Plan update in progress

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain
Gateshead, Sunderland, South Tyneside (explained in comment section)

Year of formal approval of plan

2,022

End of year plan

Comment

Sunderland City Council is currently working on a biodiversity SPD. A scoping report for the biodiversity SPD was consulted on in February 2020. The SPD will use locally relevant information on the distribution and abundance of species and habitats of importance to biodiversity conservation to inform expected standards for the protection, enhancement and restoration of biodiversity. Where possible this will include building in resilience to climate change within measures taken to further these aims. The aim will also be to increase certainty on the standards of information used to demonstrate compliance with biodiversity related planning policies, where this is most appropriately included with the SPD rather than separate planning documents.

The SPD will also be written so as to complement the Local Nature Recovery Strategy being developed jointly by the local authorities for Gateshead, South Tyneside and Sunderland. The document will aim to provide clarity and guidance on discharging the mandatory biodiversity net gain requirement, which is due to come into force in autumn 2023 through national legislation.

Area of plan and/or strategy

Water security

Attachment/ link and name of plan

Wear Catchment Plans, available at <https://catchmentbasedapproach.org/wp-content/uploads/2022/01/Final-Wear-Catchment-Partnership-Catchment-Management-Plan.pdf>

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain
Covers the Wear Catchment area.

Year of formal approval of plan

2,021

End of year plan

2,025

Comment

The Wear Catchment Partnership is one of four Catchment Partnerships within the Northumbria River Basin, and five within the North East area. There are three Local Nature Partnerships which cover the North East area and beyond. Where appropriate, the Wear Catchment Partnership works with these groups and other relevant local and regional partnerships.

The Wear Catchment Management Plans set out the aim to improve the water environment and the activities to be undertaken to work towards this. Plans will develop further as the catchment partnership grows and becomes sustainable. The plan is structured in three sections:

- Business planning – describes how the partnership is managed and how it will be sustainable into the future;
- Catchment overview – presents the Wear Catchment and introduces its subcatchments, and our approach to using data and evidence;
- Action plan – sets out the delivery activities to achieve the objectives. The action plan is the basis of, and underpins, the overall management plan. Each action plan project group will deliver its own communication and engagement and data gathering and

monitoring activity as required by that project.

Area of plan and/or strategy


Water security

Attachment/ link and name of plan

Northumbrian Water Resources Management Plan 2021 – 2025, available at <https://www.nwg.co.uk/responsibility/environment/wrmp/current-wrmp-2015-2020/>

and Northumbria Water Basin Management Plan, available at [Northumbria_RBD_Part_1_river_basin_management_plan.pdf](#) (publishing.service.gov.uk)

 [Northumbria_RBD_Part_1_river_basin_management_plan.pdf](#)

 [NW Final Water Resources Management Plan 2019.pdf](#)

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain
Covers Northumberland and Tyne and Wear.

Year of formal approval of plan

2,021

End of year plan

2,035

Comment

The Northumbrian Water Resources Management Plan 2021-2025 (WRMP – attached in section 14) and the Northumbria Water Basin Management Plan cover Sunderland and have water security targets. The WRMP aims to reduce leakage by 15% between 2020 and 2025, and a further 10% over each subsequent 5-year period through to 2045. In addition, the WRMP aims to annually reduce per capita water consumption by 0.12l/head/day (0.33 MI/day) by delivering water efficiency activities. The Northumbria Water Basin Management Plan aims to provide a long-term framework to protect water quality within the river basin district. The plan has numerous objectives in-line with the European Water Framework Directive. The main environmental objectives are to prevent deterioration of surface and groundwater; achieve good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status; reverse significant increases in the concentrations of pollutants in groundwater; and reduce discharges, emissions and losses of hazardous substances into surface water.

Area of plan and/or strategy

Sustainable urban mobility

Attachment/ link and name of plan

North East Joint Transport Committee Transport Plan

 AD.30_North_East_Transport_Plan_2021-2035 (1).pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain

Durham, Gateshead, South Tyneside, Sunderland, Newcastle upon Tyne, North Tyneside and Northumberland.

Year of formal approval of plan

2,021

End of year plan

2,035

Comment

The North East Joint Transport Committee Transport Plan is the first region-wide Transport Plan for the seven local authority areas in the North East, covering two Combined Authorities, brought together by the North East Joint Transport Committee: The North East Combined Authority (comprising Durham, Gateshead, South Tyneside and Sunderland) The North of Tyne Combined Authority (comprising Newcastle upon Tyne, North Tyneside and Northumberland).

The Plan sets out priorities and forms the basis for bids and requests for funding for transport investment in the North East up to 2035.

Delivering this Plan, achieving the vision and objectives will support a shift to a more sustainable and healthier way of life in the North East, through lowered emissions, better air quality and travel choices.

- Easier access to education, skills, and higher value jobs
 - Health levels at least equal to other regions in the UK
 - Better connections from the North East to national and international destinations
 - A transport network with improved environmental credentials including more sustainable journeys, better air quality and reduced carbon output
 - A safer and more reliable integrated transport network, which is more intuitive for customers, with a sustainable cost base
 - Direct job opportunities in the transport and infrastructure sectors
 - Enabling new development and housing sites and improving accessibility to existing communities.
-

Area of plan and/or strategy

Sustainable urban mobility

Attachment/ link and name of plan

North East Bus Service Improvement Plan (BSIP)

 TNE-BSIP_FINAL.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain
Durham, Gateshead, South Tyneside, Sunderland, Newcastle upon Tyne, North
Tyneside and Northumberland.

Year of formal approval of plan

2,022

End of year plan

2,025

Comment

The Bus Service Improvement Plan (BSIP) sets out a wide range of significant proposed improvements to every aspect of bus services that will be delivered through a formal Partnership of bus operators, the NEJTC, Local Authorities and Nexus. This is discussed further in question 9.1.


Area of plan and/or strategy

Sustainable urban mobility

Attachment/ link and name of plan

North East Rail and Metro Strategy

<https://www.transportnortheast.gov.uk/wp-content/uploads/2022/02/NorthEastRailandMetroStrategy.pdf>

 North-East-Rail-and-Metro-Strategy.pdf

Current status of plan

Other, please specify
draft – consultation closed recently

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain
Durham, Gateshead, South Tyneside, Sunderland, Newcastle upon Tyne, North
Tyneside and Northumberland.

Year of formal approval of plan

2,022

End of year plan

2,035

Comment

The Draft North East Rail and Metro Strategy builds on the North East Transport Plan and outlines the future for rail and Metro in the North East region.

To help achieve the North East Transport Plan's commitment for carbon neutral transport, the North East Rail and Metro Strategy commits to:

- increasing the number of people travelling on rail and Metro in preference to the private car,
- increasing the share of goods transported by rail
- introducing new trains, more efficient electric ones on the Metro and electric / battery / hydrogen ones on the local rail and modal shift from road to rail on freight
- improving stations and depots.

Area of plan and/or strategy

Sustainable urban mobility

Attachment/ link and name of plan

Sunderland Local Cycling and Walking Infrastructure Plan (LCWIP),
https://www.sunderland.gov.uk/media/24397/LCWIPlan/pdf/LCWIP_A4_Final_Version_September_2021_1_.pdf?m=637699028527830000

 LCWIP_A4_Final_Version_September_2021_1_.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,021

End of year plan

2,040

Comment

The draft Local Cycling and Walking Infrastructure Plan (LCWIP) document explores walking and cycling in Sunderland and sets out a Local Cycling and Walking Infrastructure Plan (LCWIP). It provides a comprehensive framework to guide Sunderland City Council and its partners regarding planned walking and cycling infrastructure over the next ten years. The plan will be used to support funding applications to enable delivery and in taking planning and design decisions regarding transport schemes more broadly, including Active Travel which is specially walking and

cycling.

The geographical scope of this LCWIP is the area within Sunderland City Councils boundary. The Council is also consulting and considering how Sunderland's network links to those of neighbouring authorities.

The LCWIP supports a local approach to delivering both the Government and City Councils ambitions to create a cycling and walking nation, as outlined in the Department for Transport's Cycling and Walking Strategy (2017) and will guide future cycling and walking developments in line with our shared walking and cycling ambitions.

Area of plan and/or strategy

Sustainable urban mobility

Attachment/ link and name of plan

Sunderland Electric Vehicle Strategy
Weblink not yet available

Current status of plan

Other, please specify
Future

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,022

End of year plan

2,040

Comment

Sunderland City Council is developing an Electric Vehicle Strategy for the city. This will involve identifying strategic gaps in citywide EV charging infrastructure and setting out a roadmap to meet the needs identified. This will be going to the Council's Cabinet in Autumn 2022.

Area of plan and/or strategy

Other, please specify
Waste Management

Attachment/ link and name of plan

South Tyne and Wear Waste Management Partnership Joint Municipal Waste Strategy
2021-2025,

<https://www.sunderland.gov.uk/media/23945/Waste-Management-Strategy-2021-25/pdf/STWWPWasteManagementStrategy202125.pdf?m=637859771360670000>

 STWWPWasteManagementStrategy202125.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Larger – covers the whole jurisdiction and adjoining areas, please explain
Sunderland, South Tyneside and Gateshead

Year of formal approval of plan

2,021

End of year plan

2,025

Comment

Sunderland, along with the neighbouring authorities of South Tyneside and Gateshead, form the South Tyne and Wear Waste Management Partnership (STWWMP). The main aims of STWWMP are to manage waste more sustainably and reduce the amount of waste sent to landfill in the region. This is ensured through reducing the amount of waste generated, reusing waste, recycling and/or composting waste as far as reasonably practical within economic and environmental constraints, recovering energy from the remaining waste and finally disposing of any residual waste safely. The STWWMP Joint Municipal Waste Strategy 2021-2025 has also recently been published to provide a strategic and coordinated approach to achieving these targets and maximise opportunities arising from the waste management sector.

Area of plan and/or strategy

Health and wellbeing

Attachment/ link and name of plan

Sunderland Healthy City Implementation Plan 2020-2030,
https://www.sunderland.gov.uk/media/23331/Sunderland-Healthy-City-Plan-2020-2030/pdf/M0103076_HEALTHY_CITY_PLAN_2021.pdf?m=637584173389400000

 M0103076_HEALTHY_CITY_PLAN_2021.pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,020

End of year plan

2,030

Comment

This implementation plan supports the delivery of our Healthy City Plan and our Covid-19 Health Inequalities Strategy. The implementation plan will remain a live plan and will continually develop to take into account emerging needs, challenges and system changes.

In delivering the ambitions set out in the Healthy City Plan and Covid-19 Health Inequalities Strategy, we present nine workstreams within this implementation plan:

- Covid-19 health inequalities
- Best start in life
- Young people aged 11-19
- Smoke free Sunderland
- Addressing alcohol harms
- Healthy weight
- Healthy economy
- Mental health and wellbeing
- Ageing well

Area of plan and/or strategy

Other, please specify

Joint Strategic Needs Assessment

Attachment/ link and name of plan

Joint Strategic Needs Assessment, weblink not yet available

Current status of plan

Plan update in progress

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2,022

End of year plan


2,025

Comment

Sunderland City Council and the Clinical Commissioning Group (CCG) have a statutory function to produce a Joint Strategic Needs Assessment (JSNA). The JSNA provides a summary of the health needs of Sunderland and highlights relevant issues for the commissioning of services.


Consumption Emissions Planning

(7.3) Does your jurisdiction have a strategy for addressing emissions from consumption of the most relevant goods and services?


	Response	Provide a link and/or attachment to the strategy addressing emissions from consumption of the most relevant goods and services	Highlight any specific action the jurisdiction is implementing to address emissions from the consumption of goods and services in this category
Food	Yes	<p>Sunderland City Council's Low Carbon Action Plan, available at: Low Carbon Action Plan</p> <p> 1</p>	<p>bon Framework and the City Council's Low Carbon Action Plan aim to reduce food waste – saving residents and businesses money and reducing emissions from the food sector.</p> <p>Strategic Priority 1 (Our Behaviour) aims to change the behaviour of residents to make sustainable food choices, reduce food waste, increase locally sourced foods, and avoid processed foods. Also, Strategic Priority 7 (Consumption and Waste) aims to reduce food miles and increase access to affordable healthy food. This will lead to the decarbonisation of the food sector emissions for the city.</p> <p>To date, some action has already been taken in Sunderland to reduce emissions from and increase the sustainability of the food sector emissions for the city.</p> <p>The Council's school meals service achieved the Green Kitchen Standard in July 2021. This national certification developed by the Soil Association and Carbon Trust recognises caterers that undertake best practice to sustainably manage energy, water and waste. This includes several measures to reduce food waste:</p> <ul style="list-style-type: none"> • Appropriate ordering, storage and stocktaking • Monitoring and measurement of all food waste • Analysis of pupil choices to ensure correct production of food • Meal portions not sold recorded on the Food Production Planner • Customer plate waste collected daily • All food waste weighed each day and recorded in Food Production Planners. The

		<p>total weight of food waste across all sites is calculated every month so that progress towards food waste targets can be monitored</p> <ul style="list-style-type: none"> • Separating of food waste from general waste in each school and placed in specific bins for collection and recycling • Analysis of food waste at individual sites helps to inform the menu development process <p>In addition to the above, through the Connect Communities initiative which supports community engagement and especially and vulnerable people, Sunderland Partnership is also operating the Common Ground Project. This brings together people through gardening and healthy eating. Through Common Ground, the number of allotments in the city will be increased and food miles will be reduced, saving CO2 emissions.</p> <p>Several partners are involved in the Common Ground Project, one of which is Forage. This non-profit charity collects surplus food through the Common Ground project from the likes of supermarkets, restaurants and other food businesses and donates this food to vulnerable residents. This saves food waste from going to landfill, reducing greenhouse gas emissions, and increases health and wellbeing.</p> <p>Finally, Sunderland’s five neighbourhood investment plans include the aim to increase healthy, sustainable food consumption.</p> <p>In addition in 2021, the EGS group identified food as a significant issue and key priority for the city moving forward. The Council’s Action Plan has recently been updated and include several actions which can help to further improve the sustainability of Sunderland’s food sector in forthcoming years. This includes raising awareness of the Too Good to Go / Olio apps, which help to reduce food waste. In addition, Sunderland City Council</p>
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			<p>has appointed a Food Partnership Coordinator, based within the Public Health Team. The coordinator is now working to bring together partners from all relevant sectors across the city to: agree local priorities for improving the food system; develop and implement a food strategy and action plan; and support a long-term approach for reducing food insecurity. These plans take into account numerous priorities relating to health inequalities, poverty and hunger, and building a more prosperous, secure and diverse local food economy, as well as helping to tackle critical sustainability issues such as food waste, supporting sustainable diets, and the climate and nature emergency.</p>
Construction and demolition	Yes	<p>Sunderland City Council's Low Carbon Action Plan, available at: https://committees.sunderland.gov.uk/committees/CMIS5/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShgo=4vUxQHuhLCfa754Og%2bWTgL41DzgOrRSMvUHir3%2b1SKL40Gxbp4rczw%3d%3d&rUzwrPf%2bZ3zd4E71kn8Lyw%3d%3d=pwRE6AGJFLDNih225F5QMaQWctPHwdhUfCZ%2fLUQzgA2uL5jNRG4jdQ%3d%3d&mCTIbcubSFfXsDGW9IXnlg%3d%3d=hFfUdN3100%3d&kCx1AnS9%2fpWZQ40DXFvdEw%3d%3d=hFfUdN3100%3d&uJovDxwdjMPoYv%2bAJvYtyA%3d%3d=ctNJFf55vVA%3d&FgPIIEJYlotS%2bYGoBi5oIA%3d%3d=NHdURQburHA%3d&d9Qjj0ag1Pd993jsyOJqFvmyB7X0CSQK=ctNJFf55vVA%3d&WGewmoAfeNR9xqBux0r1Q8Za60lavYmz=ctNJFf55vVA%3d&WGewmoAfeNQ16B2MHuCPMRKZM</p>	<p>Sunderland has a Sustainable Design and Construction Policy (BH2) as part of its CSDDP for the city. This ensures that sustainable construction is integral to development and within this, also seeks to reduce emissions from goods and services within the construction sector. This includes a requirement for major development to:</p> <ol style="list-style-type: none"> 1. Maximise energy efficiency and integrate renewable / low carbon energy. 2. Reduce construction waste and promote recycling. 3. Conserve water resources and minimise flood risk. 4. Provide details of the type of materials to be used at the appropriate stage of development. 5. Provide flexibility and adaptability, where appropriate, allowing future modification of use or layout, facilitating future refurbishment and retrofitting. 6. Incorporate measures which enhance the biodiversity value of development, such as green roofs. 7. Include a sustainability statement setting out how the development incorporates sustainable resource management and high environmental standards. 8. Maintain an appropriate buffer between

		<p>waG1PaO=ctNJf55vVA%3d</p> <p>Sunderland Core Strategy & Development Plan (CSDP), available at: https://www.sunderland.gov.uk/media/22171/Core-Strategy-and-Development-Plan-2015-2033/pdf/CSDP_2015-2033.pdf?m=637159725864470000</p> <p> 1, 2</p>	<p>sensitive development and existing wastewater treatment works to ensure amenity and operational continuity, in accordance with Government Code of Practice guidance.</p> <p>The Riverside Sunderland project is regenerating vacant, derelict and under-utilised industrial land to deliver a new residential community, a thriving business district and a focal point for civic, commercial and community life within a highly sustainable location. The Riverside Sunderland SPD, developed in 2020, links closely to the Low Carbon Framework. The SPD guides development on Riverside to achieve carbon neutrality and climate change resilience by: creating energy-efficient offices and public buildings; delivering energy-efficient homes built using modern methods of construction; encouraging sustainable travel; promoting renewable energy and energy storage; introducing green roofs and green walls; and implementing sustainable urban drainage solutions.</p> <p>Planning approvals for developments within Riverside Sunderland have addressed the SPD requirements and incorporated low carbon solutions, for example a multi-storey car park featuring green walls. Planning permission has also been granted for 132 residential units with cafes, retail and a community allotment on the Vaux site and a Future Living Expo will be held in 2024 to showcase the low carbon credentials of the site.</p> <p>Vaux Housing will be a sustainable new residential community delivering exemplar carbon reduction, renewable energy, SUDS and biodiversity standards. A fabric first approach to materials and components will ensure high natural lighting, ventilation, insulation, and airtightness reducing energy use. A smart energy network comprising photovoltaics, air source heat pumps, battery</p>
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		<p>storage will maximise energy from renewable resources and ensure distribution and consumption is carefully coordinated with supply and demand to minimise waste. Materials and components will be locally sourced and selected based on their carbon performance in manufacture, construction and operation, and the ability for future recycling and re-use. The development will prioritise sustainable transport to maximise active travel and air quality standards. The development is targeting a number of accreditations including Future Homes Standard 2025, Passivhaus for one of the residential blocks, RIBA 2025 Embodied Carbon target, Home Quality Mark 4 Star rating and Building Nature 'Excellent' standard.</p> <p>Riverside Sunderland will be a demonstrator site for research and innovation work being led by Sunderland College and Northumbria University in the fields of modern methods of construction (MMC) and advanced manufacturing. Whilst there are many pilot projects using MMC across the region and the wider UK, there are limited examples of it being undertaken at scale. Riverside Sunderland provides a unique opportunity to deliver MMC at scale; there are few opportunities to deliver 1,000 units elsewhere in the UK, and none known to be within city centre environments. Riverside Sunderland therefore also supports growth of the regional supply chain in the MMC sector. In addition, the scheme will provide education and training opportunities through the proposed Housing Innovation Construction Skills Academy (HICSA), linking to Research & Development and ensuring the skills of the region meet the future needs of industry.</p> <p>The Council's Low Carbon Action Plan has been revised and includes several actions which can help to improve the sustainability of Sunderland's construction sector in the future.</p>
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			<p>This includes objectives to reduce the embedded carbon and increase the energy efficiency of new homes built in the city; maximise the carbon neutral status and energy efficiency of new homes directly delivered by Siglion and the Council in the city; embed carbon reduction into new-build Council / Siglion assets, e.g., City Hall, Culture House, multi-story carparks and schools.</p>
Transportation	Yes	<p>North East Transport Plan 2021-2035, available at https://www.sunderland.gov.uk/media/22848/AD-30-North-East-Transport-Plan-2021-2035/pdf/AD.30_North_East_Transport_Plan_2021-2035.pdf?m=637431302877470000</p> <p> 3</p>	<p>Sunderland, along with 6 other local authorities and 2 combined authorities, make up the North East Joint Transport Committee (NEJTC). NEJTC has recently developed the North East Transport Plan 2021-2035, setting out the transport priorities for our region up to 2035. Delivering this plan will support a shift towards sustainability through lowered emissions, better air quality and travel choices. One of the main objectives of the North East Transport Plan is to make transport in the North East carbon-neutral by 2035. Significant action is required to move the North East away from the internal combustion engine private car up the transport hierarchy to more sustainable modes.</p> <p>Sunderland was an early adopter of infrastructure to support use of electric vehicles. As part of the North East Plugged-In Places programme (2010-2012), charging stations were introduced across the city. Further EV infrastructure is being rolled out across Sunderland, including new facilities in town and city centres, at municipal car parks and at key destinations. There are currently approaching 100 charging points, some of which are double bays. In 2019 it was announced that Sunderland had the highest number of EV charging points per vehicle licence holder in the whole of the UK (1 for every 1460 drivers). The city also boasts the country's first rapid charging electric vehicle</p>


		<p>station which offers four 50 kW fast chargers and two 175kW fast chargers that are enabled for 350 kW charging (the fastest available nationally). The Council has recently installed further rapid hubs and are progressing a pilot on-street charge-point scheme.</p> <p>Encouraging greater use of low emission vehicles is part of Sunderland’s strategy to become the UK’s national hub for the low carbon economy. Sunderland-based advanced manufacturing businesses are playing a key role in the decarbonisation of transport.</p> <p>Sunderland is also currently trialling E-Scooters in the city in collaboration with Neuron. and the Council is also working to introduce a new one-stop ‘mobility hub’ in the city, encouraging use of sustainable transport. This has started with provision of 10 EVs to support Sunderland City Council and Together for Children and will be rolled out to other Riverside Sunderland occupiers and residents in time and will be enhanced with wider services.</p> <p>Sunderland has ambitions to increase walking and cycling mode share in the city, and consequently, has developed a Local Cycling and Walking Infrastructure Plan (LCWIP) for the city. In addition, through the Department for Transport’s Active Travel Fund, Sunderland has been awarded just over £1 million to upgrade the National Cycle Network along the coast of Roker. It is hoped this development will later be rolled out further into the city. Furthermore, development is underway for a new pedestrian and cycle bridge at Riverside Sunderland, connecting the city centre to the northern side of the city. This will encourage active transport.</p> <p>All businesses and developers in the city are required to have a sustainable travel plan linked to planning applications.</p>
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Clothing and textiles	No		
Household appliances and electronics	No		
Aviation	Yes	The most recent annual report for the International Strategy is attached.  4	Through its commitment to decarbonise emission from business travel, Sunderland City Council is currently revising its Foreign Travel Policy to embed emissions reduction into foreign travel.
Waste management	Yes	South Tyne and Wear Waste Management Partnership Joint Municipal Waste Strategy, available at https://www.sunderland.gov.uk/media/23945/Waste-Management-Strategy-2021-25/pdf/STWWPWasteManagementStrategy202125.pdf?m=637859771360670000  5	<p>Sunderland's Low Carbon Framework and the City Council's Low Carbon Action Plan aim to reduce consumption and waste including food waste – saving residents and businesses money and reducing emissions from the waste management sector.</p> <p>Strategic Priority 7 (Consumption and Waste) aims to reduce the volume of all consumption and waste, changing what we consumed and how it is produced, continuing to avoid the disposal of waste by landfill and increasing opportunities to reuse materials and recycle waste wherever possible. Moving the city up the waste hierarchy will reduce carbon emissions from the waste sector.</p> <p>To date, there have been several key actions which have helped to reduce emissions from the waste management sector. These include the opening of a new Household Waste and Recycling Centre with reuse facility in Pallion and the trial of an Electric refuse collection vehicle,</p> <p>The Council's Low Carbon Action Plan has been revised and includes several actions to decarbonise the waste sector in Sunderland in forthcoming years.</p> <p>The City Council will ensure the implementation of its Zero Single Use Plastics</p>


			<p>commitment, developing and promoting initiatives to minimise plastic waste. The Council recently launched a Refill scheme for Sunderland (on 16th June for World Refill Day) to reduce single use plastic waste in the city. Refill is an award-winning behaviour-change campaign led by Not-for-Profit organisation 'City to Sea' to help people live with less waste by providing a platform to connect them and their communities to places they can eat, drink and shop without single-use plastic packaging. Worldwide over 350,000 people have downloaded the app and the Sunderland scheme will support businesses and consumers locally to transition towards reuse systems and tackle the global issue of plastic pollution. 104 Refill stations were already registered within the city at launch and Refill Sunderland will provide a platform for new stations to register and will help promote them.</p> <p>The Council are also seeking to undertake a feasibility study for the anaerobic digestion from food waste in partnership with other NE local authorities. Sunderland, and 10 other North East Councils, are signed up to undertake a feasibility study, supported by DEFRA for the development of a food waste treatment facility / facilities within North East England. This is being led by officers from the STWWMP. Finally and post 2023, the Environmental Bill / Waste & Resources Strategy commits Local Authorities in England to the introduction of weekly food waste collections.</p> <p>Finally, Sunderland is aiming to increase the level of composting of garden waste within the city.</p>
Other	Yes	<p>Annual Carbon Data Report 2020/21 , available at https://www.mysunderland.co.uk/media/26711/Carbon-Emissions-Report-SCC-2020-21-Final-Draft-to-Publish/pdf/Carbon_Emissio</p>	<p>Sunderland currently do not have a citywide consumption-based emissions inventory, although this is something which may be considered in the future.</p> <p>For the first time in 2021, Sunderland City Council included Purchased Goods and</p>

	ns_Report_SCC_2020-21_Final_Draft_to_Publish.pdf?m=637871847892530000  ⁶	Services in its own scope 3 carbon footprint using Environmentally Extended Input-Output data (EEIO). It was estimated that purchased goods and services were the main contributor to the Council's overall carbon footprint.
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 ¹12-01-Appendix 1 Low Carbon Action Plan Refresh 2022.pdf

 ²CSDP_2015-2033.pdf

 ³AD.30_North_East_Transport_Plan_2021-2035 (1).pdf

 ⁴R- Annual Report 20210621 (002).pdf

 ⁵STWWPWasteManagementStrategy202125.pdf

 ⁶Carbon Emissions Report SCC 2020-21 Final Draft (to Publish).pdf

Finance

(7.4) Describe any planned climate-related projects within your jurisdiction for which you hope to attract financing.

Project area

Buildings

Project title

Social Housing Decarbonisation Fund Wave 2

Stage of project development

Scoping

Status of financing

Project partially funded and seeking additional funding

Identified financing model

Grants

Project description and attach project proposal

Through the Social Housing Decarbonisation Fund (SHDF), Sunderland City Council is working with one of the housing providers in the city to decarbonise domestic energy in social homes. In partnership with Gentoo (Sunderland's main housing provider), Sunderland City Council led a successful £1.2m bid towards a £2.7m project as part of SHDF Wave 1, to improve the EPC rating of 604 social homes. This project is currently being delivered. Sunderland, working with RSLs in the city, will be seeking to develop proposals when SHDF Wave 2 is launched in August 2022 (TBC) which has a total funding pot worth £800m. A project proposal is not available at this time and costs are currently unknown.

<https://www.gentogroup.com/news/2022/february/social-housing-decarbonisation-fund-success/>

Total cost of project (in currency specified in 0.1)

Total investment cost needed if relevant (in currency specified in 0.1)

Project area

Transport

Project title

Local Electric Vehicle Infrastructure

Stage of project development

Project feasibility

Status of financing

Project partially funded and seeking additional funding

Identified financing model

Project description and attach project proposal

The £10m LEVI pilot fund is intended to encourage large scale, ambitious and commercially sustainable projects that leverage significant private sector investment to support the rollout of electric vehicle charging infrastructure. The proposed project, if funding is secured, will deliver up to 219 residential EV chargepoints across the city.

 Sunderland City Council LEVI Pilot Application.pdf

Total cost of project (in currency specified in 0.1)

822,612.7

Total investment cost needed if relevant (in currency specified in 0.1)

493,567.62

Project area

Buildings

Project title

Public Sector Decarbonisation Scheme - Wave 3

Stage of project development

Implementation

Status of financing


Project partially funded and seeking additional funding


Identified financing model

Grants

Project description and attach project proposal

The Public Sector Decarbonisation Scheme (PSDS), delivered by Salix Finance, funds capital energy efficiency and heat decarbonisation projects within public sector non-domestic buildings including central government departments and arm's length bodies in England. After a successful £2.2m bid to decarbonise 8 municipal buildings through PSDS Wave 1, SCC submitted a targeted bid to PSDS Wave 3 seeking £792,500 grant support towards £873,473 total project costs to replace old gas boilers and install low carbon heating systems and fabric measures at 2 community sites in the city – Thorney Close Action and Enterprise Centre, and the Rainbow Family Centre in Washington. Clarifications and technical query submission have been submitted. The outcome of the bid is expected soon.

 Amended 23.02.22 phase_3_psd_s_final-application_form_v1.7 Salix grant amendment.xlsx

 Copy of Public Sector Decarbonisation Scheme Application Form - SCC 070121.xlsx

Total cost of project (in currency specified in 0.1)

792,500

Total investment cost needed if relevant (in currency specified in 0.1)

873,500

Project area

Transport

Project title

Sunderland Cycling Infrastructure Development

Stage of project development

Project structuring

Status of financing

Project not funded and seeking full funding

Identified financing model

Grants

Project description and attach project proposal

The Levelling Up Fund invests in infrastructure projects that improve everyday life across the UK. The £4.8bn fund will support town centre and high street regeneration, local transport projects, and cultural and heritage assets.

Sunderland is drafting a Cycling Infrastructure Scheme for the delivery of a new pedestrian / cycle bridge across the river Wear in the Sheepfolds area, cycling infrastructure improvements in the city-centre, and the delivery of 2 new strategic cycle

routes to connect the north and the south areas of Sunderland to the new bridge.

 LUF Overview Document (1).pdf

Total cost of project (in currency specified in 0.1)

59,573,144

Total investment cost needed if relevant (in currency specified in 0.1)

26,800,000

Project area

Transport

Project title

City Region Sustainable Transport Fund (Department for Transport)

Stage of project development

Scoping

Status of financing

Project not funded and seeking full funding

Identified financing model

Grants

Project description and attach project proposal

The £4.2 billion City Region Sustainable Transport Fund (CRSTF) is planned to be a 5-year settlement at regional level, for a series of projects a region wishes to deliver and to 'begin the process of bringing their local transport systems up to the standard of the capital's.'

Funding could be used to help fund contactless ticketing, new metro or light rail systems, significant improvements in local rail and bus services, new cycle lanes, and measures to tackle congestion and pollution. A project proposal is not available at this time and costs are currently unknown.

Attachment not yet available.

Total cost of project (in currency specified in 0.1)

Total investment cost needed if relevant (in currency specified in 0.1)

Project area

Renewable energy

Project title

Sunderland Minewater Heating Network

Stage of project development

Project feasibility

Status of financing

Project partially funded and seeking additional funding

Identified financing model

Grants

Project description and attach project proposal

Sunderland City Council is looking to utilise mine water Heating opportunities for the city centre and Riverside Sunderland through the Heat Network Investment Project (HNIP) and the Green Heat Network Fund (GHNF). More detail is provided in question 9.1.

 HNIPAppForm-SunderlandCityCouncil12.03.2021.pdf

 _GHNFTransitionSchemeApplicationForm_v1.5-Sunderland-Round2(21.09.27).pdf

Total cost of project (in currency specified in 0.1)

41,000,000

Total investment cost needed if relevant (in currency specified in 0.1)

41,000,000

Project area

Nature-Based Solutions

Project title

Link Together Project

Stage of project development

Project structuring

Status of financing

Project partially funded and seeking additional funding

Identified financing model

Grants

Project description and attach project proposal

The National Lottery Heritage Fund seeks to inspire, lead and resource the UK's heritage to create positive and lasting change for people and communities, now and in the future. A successful £149,303 development phase grant bid was submitted by Sunderland City Council (including a £20,000 contribution) and Durham Wildlife Trust for the Link Together Project, which aims to develop green infrastructure and natural heritage across Council-owned land in the Coalfield area, and to support community action and involvement as well as healthier lifestyles. The project also links with the GP

Alliance and opportunities for social prescribing.

The delivery phase bid which will be submitted in Spring 2023 will seek c. £1,002,000 Heritage Fund grant support towards total estimated costs of £1,932,782, with the balance match funding from Sunderland City Council. North East Community Forest, and volunteer contributions. The total value of the development and delivery stages is £2,107,085 seeking £1,151,342.

 Link_Together_Cabinet_Report_Mar_22 final 20220302.pdf

Total cost of project (in currency specified in 0.1)

2,107,085

Total investment cost needed if relevant (in currency specified in 0.1)

1,151,342

Project area

Transport

Project title

UK Levelling Up Fund - Round 2

Stage of project development

Scoping

Status of financing

Project not funded and seeking full funding

Identified financing model

Grants

Project description and attach project proposal

The Sunderland Cycling City proposal is in drafting led by the Council and with AECOM appointed to support. The proposal will include the Cycling and Pedestrian footbridge, which will connect the city centre to the northern side of the city and encourage active transport. The overall LUF ask is likely to be c.£27m with co-funding from Sunderland City Council.

 LUF Overview Document (1).pdf

Total cost of project (in currency specified in 0.1)

27,000,000

Total investment cost needed if relevant (in currency specified in 0.1)

27,000,000

Project area

Transport

Project title

Active Travel Fund - Rounds 1, 2 and 3

Stage of project development

Project structuring

Status of financing

Project partially funded and seeking additional funding

Identified financing model

Grants

Project description and attach project proposal

In June 2021, DfT invited local authorities to bid for capital funding for the current financial year 2021/22, to support delivery of ambitious new cycling and walking infrastructure schemes. The funding is part of the Government's £2 billion commitment set out in "Gear Change" to deliver a step change in the provision of high quality schemes that deliver better streets for everyone. The call also included an opportunity for a small group of Local Authorities to take part in a pilot to provide cycling and walking interventions as part of a social prescribing offer and linking to local Clinical Commissioning Groups and Primary Care Networks. An overall bid proposal was coordinated by the Joint Transport Committee (NECA) with an EOI deadline to Government of 09/08/21.

The Council submitted both a cycling infrastructure proposal and a further proposal linked to the GP Social Prescribing Pilot focusing on Redhill and Southwick wards. This was set out in a letter signed by the Council's Chief Executive and Leader.

In November 2021, the DfT requested additional information on the Social Prescribing Pilot regarding the proposed breakdown between revenue and capital funding. The proposal is seeking up to ~£851,000 support for a 3 year pilot as follows: £75,000 Feasibility; £546,000 – 3 year Revenue support; £230,000 - 3 year Capital support which could include infrastructure, equipment, storage. It is proposed that the approach would be extended to other areas in Sunderland over the 3 years. All cost estimates are directly associated to delivery of social prescribing pilots.

The Council was advised in Jan 2022 that £80,000 has been approved to support the feasibility stage of the Social Prescribing Pilot. Urban Foresight were appointed to undertake a feasibility study in March 2022 for submission by 29/04/22. The feasibility study / application set out a proposal for the Active Travel Social Prescribing pilot project for £1,160,836 over a three-year period.

In terms of Active Travel Fund (round 3) 2 projects are being considered for support depending on funding availability – see section below for detail. A project proposal is not available at this time.

Total cost of project (in currency specified in 0.1)

1,160,836

Total investment cost needed if relevant (in currency specified in 0.1)

1,160,836

Project area

Buildings

Project title

Public Sector Low Carbon Skills Fund Phase 3

Stage of project development

Project feasibility

Status of financing

Project not funded and seeking full funding

Identified financing model

Grants

Project description and attach project proposal

Phase 3 of the Public Sector Low Carbon Skills Fund went live in June 2022. It offers £14m for the 2022-23 financial year for eligible public sector bodies to develop heat decarbonisation plans for their estates. A successful bid would help fund a heat decarbonisation plan for up to 20 Council-owned buildings across the city. A project proposal is not available at this time.

Total cost of project (in currency specified in 0.1)

100,000

Total investment cost needed if relevant (in currency specified in 0.1)

100,000

Project area

Other, please specify
UK Shared Prosperity Fund

Project title

UK Shared Prosperity Fund

Stage of project development

Scoping

Status of financing

Project not funded and seeking full funding

Identified financing model

Public finance - national government

Project description and attach project proposal

Sunderland City Council is a lead authority for the UK Shared Prosperity Fund and responsible for preparing an Investment Plan to submit to Government which, if approved, will guide investment decisions from Sunderland's UKSPF allocation. Decarbonisation interventions have been included within this document which sets the strategic context and which will enable related project activity to be developed alongside other priority areas during the 3 year UKSPF period (2022/23 – 2024/5). A project proposal is not available at this time and costs are currently unknown.

Total cost of project (in currency specified in 0.1)

Total investment cost needed if relevant (in currency specified in 0.1)

(7.5) Report the factors that support climate-related investment and financial planning in your jurisdiction.

Response

Mechanisms used by jurisdiction to access finance for climate-related projects

- Jurisdiction's own funds and budgetary means
- Jurisdiction borrows from national government
- Jurisdiction accesses finance from national government funds, grants etc.
- Jurisdiction accesses finance from public-private partnerships
- Jurisdiction partners with other jurisdictions to access finance

Comment

Sunderland City Council has tax raising powers and in addition it receives grant funding from national government which it utilises to fund low carbon activity. For significant capital investment it is able to borrow from the Public Works Loans Board (an agency of national government). The Council also bids for and secures external funding from a variety of other organisations (including national government) to support its work to deliver its low carbon agenda. This may also involve working with other neighbouring councils to access finance and funding and secure economies of scale.

Credit rating of jurisdiction

Jurisdiction does not have an international or domestic credit rating

Comment

N/A

Decarbonising jurisdiction's investments

- Jurisdiction has taken steps to decarbonise the investments held by the jurisdiction retirement funds by investing in the low-carbon economy
- Jurisdiction has taken steps to decarbonise municipal investments

Comment

Sunderland City Council does not have its own individual pension fund, instead the council and its employees participate within the Tyne and Wear Pension Fund. The Council has a single representative (18 representatives in total) on the Tyne and Wear Pension Fund Committee.

The Pension Committee have undertaken action on behalf of the Tyne and Wear Pension Fund including:

- Setting a 2050 net zero target, with an interim target of a 50 – 60% reduction in carbon emissions by 2030;
- agreeing a new Climate Change Policy;
- investing 15% of the long term allocation of quoted equities (6% of the total fund) to the Legal and General Future World series of funds which exclude coal mining companies and reduce the exposure to companies with carbon reserves by 50%
- committing 3% of the Fund to the Border to Coast Climate Opportunities fund
- committing to publish a Task Force for Climate Related Financial Disclosures (TCFD) Report for 2021/22; and
- being a long-standing member of the Local Authority Pension Fund Forum.

The Pension Fund is considering the challenges of climate change as a key factor in the ongoing review of its Investment Strategy to support the achievement of the Net Zero targets. Through its representation on the Committee, the Council is actively challenging and supporting these activities to ensure that the targets are achieved.

The Fund is currently working on its reporting around carbon metrics and is developing a roadmap which will be published in November 2022 setting out how it will deliver its Climate Change Policy targets.

Further information on the Fund's approach to climate change can be found at <https://www.twpf.info/article/74294/Climate-Change>.

Actions

8. Adaptation Actions

GCoM Common Reporting Framework Reporting Requirements for European Cities

(8.1) Describe the outcomes of the most significant adaptation actions your jurisdiction is currently undertaking. Note that this can include those in the planning and/or implementation phase.

Action^

Educational/Informational actions
Flood mapping

Climate hazard(s) that action addresses^

Urban flooding

River flooding
Coastal flooding
Storm
Heavy precipitation

Action description and web link to further information^

The SFRA uses up-to-date flood risk information together with the most current flood risk and planning policy available from the National Planning Policy Framework and Flood Risk and Coastal Change Practice Planning Guidance.

The SFRA focusses on collecting readily available flood risk information from stakeholders, the aim being to help identify the number and spatial distribution of flood risk sources present throughout the Sunderland City Council's Local Plan area to inform the application of the Sequential Test. The Assessment forms part of the evidence base for the Council's Local Plan and has informed policy content.

The SFRA was first implemented in 2011, and is updated regularly, with the most recent update being in 2020, and is subject to public consultation as part of this process.

https://sunderland.gov.uk/media/22850/AD-25-Strategic-Flood-Risk-Assessment-Level-1/pdf/AD.25_Strategic_Flood_Risk_Assessment_Level_1.pdf?m=637431304023570000

Sectors adaptation action applies to^

Agriculture
Forestry
Water supply
Sewerage, wastewater management and remediation activities
Conservation
Construction
Transportation and storage
Education
Human health and social work activities
Other, please specify
public health; spatial planning; water; business; social services; any sector which requires planning permissions

Co-benefits realised^

Job creation
Revenue generation
Reduced costs
Increased energy security
Business/technological innovation
Increased labour productivity
Improved labour conditions
Increased economic production
Reduced natural resource depletion

Reduced congestion
Reduced disruption of energy, transport, water or communications networks
Increased water security
Improved mobility and access
Improved road safety
Increased security/protection for poor/vulnerable populations
Improved education and public awareness on climate issues
Fewer or no households and businesses forced from homes/places of work
Improved physical health
Improved mental wellbeing/quality of life
Improved preparedness for health service delivery
Reduced disaster/disease/contamination-related health impacts
Reduced premature deaths
Reduced health costs
Improved water/soil quality
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Short-term (by 2025)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

<10%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year[^]

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

25,000

Action[^]

Government policies and programs actions
Disaster planning and preparedness

Climate hazard(s) that action addresses[^]

Urban flooding
River flooding

Coastal flooding
Storm
Heavy precipitation

Action description and web link to further information^

Sunderland prepares a Local Flood Risk Management Strategy every 5-6 years, with the most recent one being published in 2016 and the next due to be published later in 2022.

The purpose of the LFRMS is to act as a robust guidance tool for Risk Management Authorities operating in Sunderland to deliver a coordinated, improved approach in all flood risk management activities. In addition, the overriding vision for the LFRMS is for Sunderland City Council to take a lead role in better understanding local flood risk. Providing this information in the form of the LFRMS will enable communities to also improve their own knowledge and understanding of the risk of flooding across Sunderland.

More information can be found at https://www.sunderland.gov.uk/media/23162/Local-flood-risk-management-strategy/pdf/Sunderland_LFRMS_-_Final_Version_-_Complete.pdf?m=637502096317830000

Sectors adaptation action applies to^

Agriculture
Forestry
Water supply
Sewerage, wastewater management and remediation activities
Construction
Education
Human health and social work activities
Other, please specify
public health; spatial planning; water; business; social services; any sector which requires planning permissions

Co-benefits realised^

Job creation
Revenue generation
Reduced costs
Increased energy security
Business/technological innovation
Increased labour productivity
Improved labour conditions
Increased economic production
Reduced natural resource depletion
Reduced congestion
Reduced disruption of energy, transport, water or communications networks
Increased water security
Increased food security

Improved mobility and access
Improved road safety
Increased security/protection for poor/vulnerable populations
Improved education and public awareness on climate issues
Fewer or no households and businesses forced from homes/places of work
Improved physical health
Improved mental wellbeing/quality of life
Improved preparedness for health service delivery
Reduced disaster/disease/contamination-related health impacts
Reduced premature deaths
Reduced health costs
Improved water/soil quality
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Short-term (by 2025)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

<10%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year[^]

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

0

Action[^]

Engineered and built environment actions
Flood defence, such as flood levees and culverts

Climate hazard(s) that action addresses[^]

Urban flooding
River flooding
Coastal flooding
Storm
Heavy precipitation

Action description and web link to further information^

Sunderland City Council as landowner provides flood defence maintenance and improvement works along the River Wear and around the Port of Sunderland. Major works are currently being undertaken to ensure defences are fit for purpose through the Strategic Frontages 3 coastal project. Sunderland City Council also provides flood resilience from surface water flooding and it is expected that £38 million will be spent on increasing flood resilience in the city over the next 5 years.

Sunderland City Council has proposed schemes for flood reduction to be funded by the Regional Medium-Term Plan. Major schemes likely to go ahead in the coming year include Detford covers (£2m), Pallion (£1.5m), Strategic Frontage 3 at the Port and coast (£1m) and Hetton Caroline (£600k), as well as a number of smaller scale schemes worth £100k-150k.

<https://www.sunderland.gov.uk/article/17437/Flooding-drainage-and-water>

Sectors adaptation action applies to^

Agriculture

Forestry

Water supply

Sewerage, wastewater management and remediation activities

Public administration and defence; compulsory social security

Conservation

Construction

Other, please specify

public health; spatial planning; water; business; social services; any sector which requires planning permissions

Co-benefits realised^

Job creation

Revenue generation

Reduced costs

Increased energy security

Business/technological innovation

Increased labour productivity

Improved labour conditions

Increased economic production

Reduced natural resource depletion

Reduced congestion

Reduced disruption of energy, transport, water or communications networks

Increased water security

Increased food security

Improved mobility and access

Improved road safety

Increased security/protection for poor/vulnerable populations

Improved education and public awareness on climate issues

Fewer or no households and businesses forced from homes/places of work
Improved physical health
Improved mental wellbeing/quality of life
Improved preparedness for health service delivery
Reduced disaster/disease/contamination-related health impacts
Reduced premature deaths
Reduced health costs
Improved water/soil quality
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

<10%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes
National funds and programmes

Status of action in the reporting year[^]

Implementation underway with completion expected in less than one year

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

7,500,000

Action[^]

Engineered and built environment actions
Improved drainage

Climate hazard(s) that action addresses[^]

Urban flooding
River flooding
Coastal flooding
Storm
Heavy precipitation

Action description and web link to further information[^]

The provision of SuDS is a requirement in a range of council policies in Sunderland's Core Strategy and as part of the master planning for Riverside Sunderland, the IAMP site and the South Sunderland Growth Area.

<https://www.sunderland.gov.uk/article/17437/Flooding-drainage-and-water>

Sectors adaptation action applies to^

Forestry

Sewerage, wastewater management and remediation activities

Conservation

Construction

Other, please specify

public health; spatial planning; water; business; social services; any sector which requires planning permissions

Co-benefits realised^

Job creation

Revenue generation

Reduced costs

Increased energy security

Business/technological innovation

Increased labour productivity

Improved labour conditions

Increased economic production

Reduced natural resource depletion

Reduced congestion

Reduced disruption of energy, transport, water or communications networks

Increased water security

Increased food security

Improved mobility and access

Improved road safety

Increased security/protection for poor/vulnerable populations

Increased social inclusion, equality and justice

Increased transparency and accountability

Improved education and public awareness on climate issues

Fewer or no households and businesses forced from homes/places of work

Improved physical health

Improved mental wellbeing/quality of life

Improved preparedness for health service delivery

Reduced disaster/disease/contamination-related health impacts

Reduced premature deaths

Reduced health costs

Improved water/soil quality

Increased/improved green space

Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Short-term (by 2025)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year[^]

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Action[^]

Ecosystem-based actions

Green infrastructure

Climate hazard(s) that action addresses[^]

Extreme heat

Extreme cold

Urban flooding

River flooding

Coastal flooding

Extreme wind

Storm

Heavy precipitation

Biodiversity loss

Action description and web link to further information[^]

Sunderland has a Green Infrastructure Strategy (SGIS) which supports the Core Strategy and Development Plan 2015-2033. SGIS builds upon Sunderland Council's Greenspace Audit and utilises a range of wider socio-economic and environmental indicators, relevant to the National Planning Policy Framework objectives, to map where there is greatest area-based need for the public benefits that green infrastructure brings. To translate SGIS into a series of projects for delivery and action over the next 15 years, from 2018-2033, Sunderland also has a Green Infrastructure Delivery and Action Plan. A range of actions are set out in this document, some of which include the development of a 'Green Infrastructure Offsetting Matrix', creating filter strips and natural swales, permeable paving, wetlands and woodlands wherever feasible to help cope with flash flooding, repairing broken corridors, creating reed beds at stream sources to slow down

flash flooding, increasing woodland cover, and creating buffer zones to protected wildlife sites.

Among a wealth of benefits, SGIS and Green Infrastructure Delivery and Action Plan help Sunderland's rural, urban and coastal communities mitigate the risks associated with climate change and adapt to its impacts through nature-based solutions by: storing carbon; improving drainage and managing flooding; improving water quality; supporting adaptive management in coastal infrastructure; reducing air pollution; and increasing shading cover.

Green Infrastructure improvements proposed also seek to improve the cycle network across the city and access to local facilities on foot, thereby promoting and encouraging a modal shift to active transport.

Note – the costs included reflect the total essential cost for the delivery of green infrastructure in the city, as stated in the Infrastructure Delivery Plan (available at https://www.sunderland.gov.uk/media/20388/Publication-Draft-Infrastructure-Delivery-Plan-2017-/pdf/66_Publication_Draft_Infrastructure_Delivery_Plan_2018.pdf?m=636644851765170000) which gives further details on the associated costs with specific green infrastructure projects.

The Council has also commenced work to help improve green infrastructure / biodiversity in the local area. For example, the £250,000 Green Recovery Challenge Fund project – 'Healing Nature' – was completed in March 2022. Public events were attended by more than 800 people, and over 500 children from 29 schools engaged with nature through the project. Ten wildlife sites were improved in Sunderland with works including scrub removal, pond and wet grassland restoration and access improvements. In addition, the North East Community Forest and the Link Together project which are both discussed in section 9, each benefit biodiversity.

Sectors adaptation action applies to^

- Forestry
- Conservation
- Construction

Co-benefits realised^

- Job creation
- Reduced costs
- Increased security/protection for poor/vulnerable populations
- Increased social inclusion, equality and justice
- Improved physical health
- Improved mental wellbeing/quality of life
- Improved air quality
- Reduced disaster/disease/contamination-related health impacts
- Reduced health costs

Reduced GHG emissions
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

90-100%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes
National funds and programmes

Status of action in the reporting year[^]

Implementation underway with completion expected in more than one year

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Action[^]

Educational/Informational actions
Early warning and response systems

Climate hazard(s) that action addresses[^]

Extreme heat
Extreme cold
Urban flooding
River flooding
Coastal flooding
Extreme wind
Storm
Heavy precipitation
Biodiversity loss

Action description and web link to further information[^]

As a city we receive Weather Warnings directly from the Met Office to enable mitigating action to be undertaken. In the case of a widespread Event the Local Resilience Forum would be stood up and we would deal with the situation in a Multi-Agency capacity as

part of our well-established emergency planning and response approach.

<https://www.metoffice.gov.uk/>

Sectors adaptation action applies to^

Other, please specify

Public health

Co-benefits realised^

Reduced costs

Increased economic production

Reduced disruption of energy, transport, water or communications networks

Improved road safety

Increased security/protection for poor/vulnerable populations

Improved education and public awareness on climate issues

Fewer or no households and businesses forced from homes/places of work

Improved physical health

Improved mental wellbeing/quality of life

Reduced health impacts from extreme heat or cold weather

Reduced disaster/disease/contamination-related health impacts

Reduced premature deaths

Reduced health costs

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

90-100%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year^

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is not included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

0

Action^

Government policies and programs actions
Disaster planning and preparedness

Climate hazard(s) that action addresses^

Extreme heat
Extreme cold

Action description and web link to further information^

The Northumbria Local Resilience Forum (LRF) Community Risk Register lists Adverse Weather and Failure of Essential Services as a top risk in the North East and gives advice to the community as to how to mitigate.

Sunderland City Council is also following the recommended guidance from both the UK Heatwave and UK Cold Weather Plans, which further guide public agencies to reduce the risks to health from these respective climate hazards.

<https://www.gateshead.gov.uk/media/2879/Northumbria-community-risk-register-booklet/pdf/Northumbria-Community-Risk-Register-version-6.pdf?m=636409117667530000>

Sectors adaptation action applies to^

Other, please specify
Public Health

Co-benefits realised^

Increased security/protection for poor/vulnerable populations
Improved education and public awareness on climate issues
Reduced health impacts from extreme heat or cold weather
Reduced disaster/disease/contamination-related health impacts
Reduced health costs

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

90-100%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Other, please specify source(s)
N/A

Status of action in the reporting year^

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is not included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

0

9. Mitigation Actions

GCoM Common Reporting Framework Reporting Requirements for European Cities

(9.1) Describe the outcomes of the most significant mitigation actions your jurisdiction is currently undertaking. Note that this can include those in the planning and/or implementation phases.

Primary emissions sector addressed and action type[^]

Generation of grid-supplied energy
Smart grid

Action description and web link to further information[^]

The proposed Microgrid at the International Advanced Manufacturing Park will bring together energy generation, consumption and storage to secure both cost reduction and decarbonisation benefits. Sunderland City Council is leading the project that aims to deliver this 100% renewable electricity 'Microgrid' that will save 55,000 tonnes of carbon annually, working closely with industry partners.

The Microgrid requires several key elements: a Direct Connection through National Grid, through a Bilateral Connection Agreement, to enable a move to Transmission rather than Distribution charges; co-creation of the financial / operational model to include a clear return on investment following the initial capital investment; risk mitigation in relation to resilience and tariff stability; clear policy direction in relation to renewables and decarbonisation. The Direct Connection from National Grid effectively bypasses the local distribution supplier as it provides cheaper wholesale electricity which is then fed forward through a private network. This feeds through to the multiple customers with directly managed demand within the microgrid network through renewable and battery storage.

Significant development work has been undertaken with National Grid already to establish a programme and contract to deliver a Direct Connection to the IAMP to support this project and design work is underway. This direct connection will provide the backbone for a microgrid which will deliver an increase in supply and enable more cost competitive energy delivery, coupled with renewable energy to be generated on a phased basis and fed into the microgrid to meet the energy demand of companies at the IAMP

The microgrid development represents a significant opportunity for private sector investment including in renewable energy to create an environment whereby electric

vehicles are being manufactured at scale from green energy.

<https://www.sunderland.gov.uk/article/19177/Nissan-unveils-EV36Zero-a-1bn-Electric-Vehicle-EV-Hub-to-accelerate-the-journey-to-carbon-neutrality>

Start year of action

2020

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action
Estimated annual renewable energy generated due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

55,000

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

76,000

Co-benefits realised^

Job creation
Increased energy security
Reduced natural resource depletion
Reduced disruption of energy, transport, water and communications networks
Enhanced climate change adaptation

Funding source(s)

National funds and programmes
Public-private partnerships

Status of action in the reporting year^

Implementation underway with completion expected in more than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

80,000,000

Primary emissions sector addressed and action type^

Stationary energy
On-site renewable energy generation

Action description and web link to further information^

Phase 1 of the Riverside Sunderland project follows the development of the Beam and City Hall and includes Vaux housing, a new multi-storey carpark, two additional commercial buildings and the new Eye Hospital as well as HICSA.

Planning approval has been granted for all of these projects. Planning will be brought forward for HICSA during this year. Delivery plans are in place for approved schemes.

The carbon savings, energy savings, and renewable energy generation figures refer specifically to Vaux housing. Further detailed figures will be developed for the remaining aspects of phase 1 at the appropriate time.

<https://sunderlandexpo.com/>

Start year of action

2021

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual energy savings due to action

Estimated annual renewable energy generated due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

227

Estimated annual energy savings (MWh/year)^

437

Estimated annual renewable energy generation (MWh/year)^

110

Co-benefits realised^

Increased energy security

Reduced natural resource depletion

Reduced disruption of energy, transport, water and communications networks

Enhanced climate change adaptation

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year^

Implementation underway with completion expected in more than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

41,436,325

Primary emissions sector addressed and action type^

Agriculture, Forestry and Land Use
Action to address forest degradation

Action description and web link to further information^

Sunderland City Council and partners (the Woodland Trust, the Forestry Commission as well as the other 6 North Eastern Local Authorities), recently submitted a successful bid to England Community Forests and DEFRA to form the North East Community Forest (NECF) Partnership. It was launched in February 2022.

The NECF partnership will plant 500 hectares deliverable by 2025.

The North East Community Forest (NECF) will assist with tackling three global crises on a regional scale: climate change, biodiversity collapse and the physical and mental health impacts of COVID-19. In addition to protecting and enhancing our existing tree stock, we can: reduce the risk of flooding, create new habitat for wildlife, improve air quality, provide positive impacts on human health and wellbeing, boost the economy, provide new jobs, provide timber for sustainable building and energy production, and store thousands of tonnes of carbon.

Additionally, we will engage, work with and be supported by the wider community, which will include, but not be limited to: NGOs, professional bodies and local partnerships, national infrastructure providers, businesses, community groups, the education and environment sector, private and public landowners, local environmental charities, the health sector, communities and individuals.

The main funding source between 2021-25 is Trees for Climate DEFRA funding. If Sunderland delivers 45 hectares of woodland in this timeframe, then it is estimated that £765,000 funding will be unlocked. Further funding sources are expected to be unlocked and this is expected to become a multi-million-pound project over its lifetime. The £12,750 figure in the 'total cost provided by local government' box relates to Sunderland City Council's annual contribution for the first year and is subject to change annually.

During the first planting season for the NECF, Sunderland planted 15,830 tree and shrub plants across a 7.37-hectare land area. Across this full area, wildflower grasses were also sown. Sunderland aim to plant 10 hectares across its land area in the 2022/23 planting season.

Sunderland is also undertaking further schemes on a local level, such as the Local Authority Treescapes Fund (LATF), which has planted 844 trees in central Sunderland across 2 hectares of land.

Planting funding comprises of DEFRA Trees for Climate and Local Authority Treescapes Fund, together with Trees for Cities charity funding, City Council funding and a donation from the Woodland Trust. The total funding amounted to approximately £208,000 for the

2021/22 planting season.

<https://www.newcastle.gov.uk/northeastcommunityfores>

Start year of action

2021

Year for which mitigation is expected to last

2036

Impact indicators measured[^]

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO₂e/year)[^]

471

Estimated annual energy savings (MWh/year)[^]

Estimated annual renewable energy generation (MWh/year)[^]

Co-benefits realised[^]

Job creation
Revenue generation
Reduced costs
Reduced natural resource depletion
Reduced disruption of energy, transport, water and communications networks
Increased food security
Improved education and public awareness
Enhanced climate change adaptation
Enhanced resilience to shocks and disasters
Improved physical health
Improved mental wellbeing/quality of life
Improved air quality
Improved preparedness for health service delivery
Reduced health impacts from extreme heat or cold weather
Reduced disaster/disease/contamination-related health impacts
Reduced premature deaths
Reduced health costs
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes
National funds and programmes

Status of action in the reporting year[^]

Implementation underway with completion expected in more than one year

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

765,000

Primary emissions sector addressed and action type[^]

Stationary energy

On-site renewable energy generation

Action description and web link to further information[^]

The Council is hoping to utilise renewable energy in the form of minewater in the city centre, as well as district heating opportunities citywide.

Regarding the city centre, phase 1 of the minewater project will be focused on Riverside Sunderland and key partners. A high-level feasibility review of mine workings beneath the city centre, identifying the overlay of heat demand, potential abstraction points and envisaged temperatures has been completed. We have also outlined a business case for this project and stakeholder engagement is ongoing. Green Heat Network – Transition Scheme Funding has been secured and borehole market engagement has also recently been completed, it is envisaged that pilot boreholes will be sunk later this year.

Regarding citywide district heating opportunities, In autumn 2021 the Department for Business, Energy and Industrial Strategy (BEIS) consulted on proposals for the implementation of Heat Network Zones in the England. The overall aim of this is to develop heat networks in zones where they can provide the lowest cost low carbon heat to the end-consumer in England through regulation, mandating powers, and market support. Sunderland is 1 of 28 pilot cities assisting BEIS with their methodology for heat network zoning – working with major and large energy users among the city's business community and public sector.

The figures for CO2 savings and renewable energy production are for the phase 1 of the city centre scheme, and there is capacity and scope for expansion beyond this.

Weblink not yet available.

Start year of action

2021

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action
Estimated annual renewable energy generated due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

4,100

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

33,000

Co-benefits realised^

Job creation
Increased energy security
Reduced natural resource depletion
Reduced disruption of energy, transport, water and communications networks
Enhanced climate change adaptation
Enhanced resilience to shocks and disasters
Improved air quality
Improved preparedness for health service delivery
Reduced health impacts from extreme heat or cold weather

Funding source(s)

Jurisdiction's own resources
National funds and programmes
Public-private partnerships

Status of action in the reporting year^

Feasibility finalized, and finance fully secured

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

43,000,000

Primary emissions sector addressed and action type^

Stationary energy
Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings

Action description and web link to further information^

After a successful bid to Phase 1 of the Public Sector Decarbonisation Scheme (PSDS1), Sunderland City Council is carrying out heat decarbonisation and energy efficiency measures to 8 operational buildings. Works were completed in summer 2022.

Start year of action

2021

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual energy savings due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

375

Estimated annual energy savings (MWh/year)^

1,574

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

Job creation

Reduced costs

Increased energy security

Enhanced climate change adaptation

Improved preparedness for health service delivery

Funding source(s)

National funds and programmes

Status of action in the reporting year^

Implementation underway with completion expected in less than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

2,219,000

Primary emissions sector addressed and action type^

Waste

Recycling or composting collections and/or facilities

Action description and web link to further information^

The new Household Waste Recycling Centre at Pallion Industrial Estate is larger than the old facility at Beach Street. The split-level design makes it easier for householders to use the waste containers, with no steps to climb, and operationally it is possible to change over the waste containers without having to temporarily close the site.

The new facility is more efficient, with better facilities and opportunities to recycle and re-use more waste materials. This will help increase the amount of household waste

recycled, reduce congestion and be more user friendly for residents.

The site also includes a purpose-built recycling/re-use shop, scheduled to open in September 2022. The shop, which is situated on site has its own car park and pedestrian access. Any re-usable items such as furniture, working electrical items, clothing, bikes, toys, books, CDs, bric-a-brac and other household items can be donated directly to the re-use shop, where donations can be sold at low prices and enjoyed by somebody else.

Analysis of the impact including increasing recycling rates and reduced waste will be established in the future.

<https://www.sunderland.gov.uk/article/17179/New-Household-Waste-Recycling-Centre>

Start year of action

2021

Year for which mitigation is expected to last

2051 or later

Impact indicators measured[^]

None of the above impacts associated with this action have been measured

Estimated annual emissions reductions (metric tons CO₂e/year)[^]

Estimated annual energy savings (MWh/year)[^]

Estimated annual renewable energy generation (MWh/year)[^]

Co-benefits realised[^]

Job creation
Reduced natural resource depletion
Reduced congestion
Enhanced climate change adaptation
Improved waste management

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year[^]

Implementation complete in the reporting year

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

5,000,000

Primary emissions sector addressed and action type^

Stationary energy

Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings

Action description and web link to further information^

Sunderland's allocation for the Green Homes Grant LAD Delivery Phase 2 is £1.7 million, with c. £1.6 million allocated for capital works. It is expected that 270 properties will be retrofitted with 495 total measures to improve energy efficiency and reduce carbon emissions.

The eligible interventions are external walls, double glazing, heat pumps, cavity walls, room in roof, loft insulation, solar and other.

The LAD scheme aims to raise the energy efficiency of low-income and low EPC rated homes including those living in the worst quality off-grid gas homes, delivering progress towards reducing fuel poverty, phasing out the installation of high carbon fossil fuel heating and the UK's commitment to net zero by 2050.

As of July 2022, LAD 2 has assisted 167 properties with 319 measures. The total value of measures to date is £1,139,389.

Estimated figures for carbon and energy savings are not yet available.

Start year of action

2021

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual energy savings due to action

Estimated annual renewable energy generated due to action

Estimated annual emissions reductions (metric tons CO₂e/year)^

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

Job creation
Increased energy security
Reduced natural resource depletion
Improved physical health
Improved mental wellbeing/quality of life
Improved air quality
Improved preparedness for health service delivery

Funding source(s)

Jurisdiction's own resources
National funds and programmes

Status of action in the reporting year^

Implementation underway with completion expected in less than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

1,700,000

Primary emissions sector addressed and action type^

Stationary energy
LED / CFL / other luminaire technologies

Action description and web link to further information^

Over the last 5 years, the Council has replaced over 48,000 streetlights across the city with LED lighting. From the start of the project until now, this has reduced annual energy consumption from streetlighting by over 20,000MWh, and annual carbon savings of 5,370 tonnes.

In addition to the street lighting replacement scheme, the Council is now delivering LED lighting to parks and associated buildings, Traffic Signals and Lit Signs, which will deliver additional carbon and energy savings. It is expected that the project will be finished later in 2022.

Start year of action

2016

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured^

Estimated annual emissions reductions due to action
Estimated annual energy savings due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

557

Estimated annual energy savings (MWh/year)^

2,200

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

Job creation
Reduced costs
Improved road safety
Improved air quality

Funding source(s)

National funds and programmes

Status of action in the reporting year^

Implementation underway with completion expected in less than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

1,750,000

Primary emissions sector addressed and action type^

Stationary energy
Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings

Action description and web link to further information^

Sunderland City Council delivers the Business Renewables Energy Efficiency Sunderland (BREEZ) project for Small and Medium-Sized Enterprises (SMEs). The overall objective of BREEZ is to reduce energy consumption and enable carbon reduction in a compliant and cost-effective way. This is achieved by upgrading old, inefficient systems with new, energy-efficiency upgrades that have been approved and agreed prior to their installation. This is then followed by upgrading old, inefficient systems with new, energy-efficiency measures that have been recommended in the audit. Typically, BREEZ offers 50% grant funding towards microgeneration (e.g. Photovoltaics), Insulation, low-carbon heating upgrades and LED lighting. Grant support for upgrading business process equipment may also be available. As of summer 2022, 124 SMEs have been engaged to date (including audits / advice and guidance / grants awarded). 19 grants have been claimed with an average value of £7,866.

In addition to the BREEZ project, Sunderland was also part of the Business Energy Saving Team (BEST) which ran until March 2022. BEST was a project funded by the European Regional Development Fund (ERDF) and delivered by local authorities in

North East England. The BEST team provided businesses with a full energy audit, designed to help identify ways to save energy, money, and carbon emissions. If businesses met certain criteria the BEST team could also provide a grant to help cover costs. As of the end of BEST in March 2022, Sunderland City Council lead the regional performance table, with 21 approvals, 14 grants claimed, and a total project value of £130,000 invested in energy efficiency improvements saving 327 tonnes of carbon equivalent. Note - annual CO2e emissions reduction estimates are for BEST only as BREEZ figures are currently unavailable.

Both BREEZ and BEST involve close cooperation between project staff from the Council and the wider Business Investment Team and businesses.

Start year of action

2021

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured^

- Estimated annual emissions reductions due to action
- Estimated annual energy savings due to action
- Estimated annual renewable energy generated due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

327

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

- Job creation
- Reduced costs
- Increased energy security
- Reduced natural resource depletion
- Reduced disruption of energy, transport, water and communications networks
- Enhanced climate change adaptation

Funding source(s)

International (including ODA)

Status of action in the reporting year^

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Primary emissions sector addressed and action type[^]

Stationary energy
Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings

Action description and web link to further information[^]

Sunderland City Council recently secured funding to support low carbon / fuel poverty measures through the Warm Homes Fund.

Lot 1 of the Warm Homes Fund project aims to fit 135 air source heat pumps in the oldest and coldest private properties. Lot 2 aims to deliver complementary energy efficiency advice and support targeting these properties, bringing together local organisations (Groundwork North East, Citizens Advice Bureau, as community partners) to provide energy efficiency services, debt advice and health related programmes.

Estimated savings are a high-level estimate and a more accurate figure can be provided next year, when the archetypes of properties benefitting from the project are better understood.

Start year of action

2022

Year for which mitigation is expected to last

2051 or later

Impact indicators measured[^]

Estimated annual emissions reductions due to action
Estimated annual energy savings due to action

Estimated annual emissions reductions (metric tons CO₂e/year)[^]

270

Estimated annual energy savings (MWh/year)[^]

Estimated annual renewable energy generation (MWh/year)[^]

Co-benefits realised[^]

Job creation
Reduced costs
Increased energy security
Business/technological innovation

Reduced natural resource depletion
Reduced disruption of energy, transport, water and communications networks
Increased security/protection for poor/vulnerable populations
Enhanced climate change adaptation
Enhanced resilience to shocks and disasters
Improved physical health
Improved mental wellbeing/quality of life
Improved air quality
Reduced premature deaths
Reduced health costs

Funding source(s)

Jurisdiction's own resources
National funds and programmes

Status of action in the reporting year[^]

Feasibility finalized, and finance fully secured

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

948,143

Primary emissions sector addressed and action type[^]

Transportation
Advance micromobility transportation

Action description and web link to further information[^]

Sunderland City Council's e-scooter trial began in March 2021 with e-scooters deployed across the city within a controlled geofenced zone.

The trial, operated by Neuron Mobility in partnership with the City Council, is aimed at:

- Assisting the Department for Transport in their decision to legalise e-scooters.
- Helping our local economy recover from COVID-19 by providing the city with a safe, socially-distanced and environmentally-friendly transport option.
- Supporting objectives of City Council's Low Carbon Framework, to become a carbon neutral city by 2040 and a Carbon neutral Council by 2030.
- Commuter journeys to key employment and education routes from City Centre to Hospital & University
- Leisure Journeys for visitors and tourists along Seafront, linking City Centre and Metro stations

To date in 2022, the e-scooters have made 25,608 journeys over 42,298km. The trial area was also expanded in May 2022, seeing the scooters become available at the IAMP Area and at Washington Road, meaning a wider demographic can benefit from a further radius and more availability.

Start year of action

2021

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

8

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

Job creation
Revenue generation
Increased energy security
Business/technological innovation
Increased economic production
Reduced natural resource depletion
Reduced congestion
Improved mobility and access
Improved road safety
Improved physical health
Improved mental wellbeing/quality of life
Reduced noise/light pollution

Funding source(s)

National funds and programmes

Status of action in the reporting year^

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

0

Primary emissions sector addressed and action type^

Transportation
Improve bus infrastructure, services, and operations

Action description and web link to further information^

The North East’s first Bus Service Improvement Plan (BSIP) outlines region-wide ambitions to make buses more attractive by making them an affordable and practical alternative to using private cars for more people and helping existing bus users to travel more frequently. The ambitious plan aims to return bus ridership – currently 25% lower than before the pandemic – to pre-Covid levels by the end of the next financial year and to grow by 10% each year thereafter. This would provide a major economic boost to the region, reduce road congestion, and contribute towards climate change targets.

The BSIP aims to:

- Repair the damage caused by COVID-19 to bus ridership in the North East by returning to the 162m million trips by March 2023.
- Grow bus patronage, targeting a growth of 10% on the 2019 baseline by March 2024 and a further 10% by March 2025.
- Grow bus modal share by 1 percentage point by March 2024, and another 1% by March 2025.
- Grow bus passenger satisfaction to 92% by March 2024 and 93% by March 2025.
- Make buses faster, punctual and reliable.
- Make buses greener, bringing them all to Euro 6 or better by March 2025.

The numerous measures proposed include improvements to timetables and fares, extensive priority measures on roads and at junctions to speed buses up – including two new Park & Ride sites, new and attractive waiting facilities, a set of affordable fare “caps” that work across all buses and Metro services, lower fares for many young people and simplified and improved information.

Start year of action

2021

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

356

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

- Job creation
- Reduced congestion
- Reduced disruption of energy, transport, water and communications networks
- Improved mobility and access

Improved road safety
Increased social inclusion, equality and justice
Improved air quality

Funding source(s)

Public-private partnerships

Status of action in the reporting year[^]

Feasibility finalized, and finance partially secured

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

880,000,000

Primary emissions sector addressed and action type[^]

Transportation
Improve fuel economy and reduce CO2 emissions from trucks

Action description and web link to further information[^]

Sunderland City Council commenced a 24-month trial for the city's first electric Refuse Collection Vehicle (RCV) in June 2021 to help lower CO2 emissions from the transportation of waste.

The Dennis Eagle eCollect has joined Sunderland City Council's growing EV fleet that is helping to reduce carbon emissions, keep the air cleaner, and be more cost-effective and efficient for council-tax payers.

It is understood to be the first of its kind in the North East region.

The Dennis will be collecting approximately 20 tonnes of waste daily and is expected to clock up 10,000 miles every year.

So far in 2022, the Dennis has collected 1,507 tonnes of waste and has clocked 2,393 miles.

Start year of action

2021

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured[^]

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)[^]

13

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

- Job creation
- Reduced costs
- Increased energy security
- Business/technological innovation
- Improved labour conditions
- Reduced natural resource depletion
- Improved air quality
- Improved waste management
- Reduced noise/light pollution

Funding source(s)

International (including ODA)

Status of action in the reporting year^

Action in operation (jurisdiction-wide)

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

415,000

Primary emissions sector addressed and action type^

Transportation
Improve fuel economy and reduce CO2 emissions from motorized vehicles

Action description and web link to further information^

The council-led Mobility Hub aims to bring about reduced emissions, increase active travel and promote improved health and wellbeing among the council's workforce, with a wider ambition to offer sustainable modes of transport to the public in due course as people become increasingly discerning about the impact of their lifestyle and choices on the planet. Now fully operational for Council employees, it is expected that in future the hub will also be of particular benefit to the 10,000 people who will eventually work from Riverside Sunderland, as well as the 2,500 residents who will live in the area when the site is fully developed.

Linking with a solar energy project for St Mary's Multi Storey Car Park, where the majority of the EV's are kept, allows for grey fleet mileage not only to be replaced by zero tailpipe emissions, but for many of these miles to be powered by renewable

electricity.

Start year of action

2021

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured[^]

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO₂e/year)[^]

10

Estimated annual energy savings (MWh/year)[^]

Estimated annual renewable energy generation (MWh/year)[^]

Co-benefits realised[^]

Job creation
Reduced costs
Increased energy security
Business/technological innovation
Increased labour productivity
Improved labour conditions
Reduced natural resource depletion
Reduced congestion
Improved mobility and access
Improved air quality
Reduced noise/light pollution

Funding source(s)

National funds and programmes

Status of action in the reporting year[^]

Action in operation (targeted to sector/location)

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Primary emissions sector addressed and action type[^]

Stationary energy

Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings

Action description and web link to further information^

Sunderland Council commenced a £10,000 Innovation Challenge with the Digital Catapult to identify an SME to develop and pilot a digital product or service which can improve energy efficiency within Council buildings. The proposal began with a test site / sites and the solution is required to be scalable. The challenge was launched in summer 2021.

Nomad Energy Solutions Ltd was the successful SME and focused its pilot on the Evolve and Leechmere Centres operated by the City Council. The trial provided short-, medium- and long-term suggestions in the form of a report, and both buildings are experiencing reductions in carbon emissions. The Council is now working with Nomad Energy Solutions to consider the potential for a wider phased decarbonisation plan for the rest of the operational estate.

Start year of action

2021

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual energy savings due to action

Estimated annual renewable energy generated due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

Job creation

Revenue generation

Reduced costs

Increased energy security

Business/technological innovation

Increased economic production

Reduced disruption of energy, transport, water and communications networks

Improved mobility and access

Improved road safety

Improved air quality

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year[^]

Implementation underway with completion expected in less than one year

Inclusion in climate action plan and/or jurisdiction development/master plan[^]

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

10,000

Primary emissions sector addressed and action type[^]

Stationary energy

Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings

Action description and web link to further information[^]

The Heat Pump Ready Programme (BEIS) is a fully funded initiative to design and demonstrate innovative, optimised solutions to deliver more cost-effective and high-density deployment of domestic heat pumps.

The Council is developing a partnership with Utilata, BEIS and Northern Powergrid initially conducting a study into the feasibility of high density air source heat pump deployment into cross tenure properties in on gas areas and any impact on the electricity grid in sub-station areas.

The approach aims to target the lower socioeconomic demographic which will deliver significant cost reductions for the consumer whilst demonstrating a more hassle-free journey. It is proposed that in Sunderland, 30-40 ASHPs will be trialled across different tenures over a 6–12-month period, at no additional cost to the residents. Also, the project will explore energy tariffs including time of use and demand side response for heat pump consumers inclusive of prepayment customers.

Start year of action

2022

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured[^]

Estimated annual emissions reductions due to action

Estimated annual energy savings due to action

Estimated annual renewable energy generated due to action

Estimated annual emissions reductions (metric tons CO₂e/year)[^]

Estimated annual energy savings (MWh/year)^

Estimated annual renewable energy generation (MWh/year)^

Co-benefits realised^

- Reduced costs
- Increased energy security
- Reduced natural resource depletion
- Reduced disruption of energy, transport, water and communications networks
- Reduced fuel poverty
- Increased security/protection for poor/vulnerable populations
- Increased social inclusion, equality and justice
- Enhanced climate change adaptation
- Improved physical health
- Improved mental wellbeing/quality of life
- Improved air quality

Funding source(s)

- National funds and programmes

Status of action in the reporting year^

- Feasibility finalized, and finance fully secured

Inclusion in climate action plan and/or jurisdiction development/master plan^

- Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Further Information

(10.1) Use this field to provide any additional information or context that you feel is relevant to your jurisdiction's response. Please note that this field is optional and is not scored/assessed.

The commitment to the Low Carbon agenda as a cross cutting theme within the City Plan has meant that work to effectively mitigate and adapt to climate change is becoming more significant in Sunderland. Partner organisations are continuing to develop their own Low Carbon Action Plans in line with the seven strategic priorities of the citywide Low Carbon Framework. To continue its leadership within the city, the Council is has also developed a more robust version of its own Low Carbon Action Plan, which was approved by Cabinet in July 2022 and as available at <https://committees.sunderland.gov.uk/committees/CMIS5/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShgo=4vUxQHuhLCfa754Og%2bWTgL41DzgOrRSMvUHir3%2b1SKL40Gxbp4rczw%3d%3d&rUzwRPf%2bZ3zd4E7lkn8Lyw%3d%3d=pwRE6AGJFLDNIh225F5QMaQWcPHwdhUfCZ%2fLUQzgA2uL5jNRG4jdQ%3d%3d&mCTIbCubSFfXsDGW9lXnlg%3d%3d=hFflUdN3100%3d&kCx1AnS9%2fpWZQ40DXFvdEw%3d%3d=hFflUdN3100%3d&uJovDxwdjMPoYv%2bAJvYtyA%3d%3d=ctNJf55vVA%3d&FgPIIEJYlotS%2bYGoBi5oIA%3d%3d=NHdURQburHA%3d&d9>

Qjj0ag1Pd993jsyOJqFvmyB7X0CSQK=ctNJf55vVA%3d&WGewmoAfeNR9xqBux0r1Q8Za60la
 vYmz=ctNJf55vVA%3d&WGewmoAfeNQ16B2MHuCpMRKZMwaG1PaO=ctNJf55vVA%3d.
 This has been enabled through greater cross-organisational working since January 2021, through
 the Council’s Carbon Task Group, and an increased understanding of data.

Sunderland City Council has used the feedback from the 2021 CDP disclosure to assess weaker
 areas (adaptation goals, transport, waste and food) and has included a greater focus on these
 areas for the 2022 disclosure. Firstly, regarding adaptation goals, the city has introduced a goal
 surrounding hectares of trees planted – which will assist carbon sequestration and protect
 against climate hazards such as biodiversity loss, flooding and heat waves. Also, Sunderland has
 included detail regarding the number of properties and residents it wishes to reduce flood risk for.
 Regarding transport, Sunderland is progressing its Local Cycling and Walking Infrastructure Plan
 and Electric Vehicle Strategy, in addition to contributing to the progression of the regional Metro
 & Rail Strategy and Bus Service Improvement Plan. Regarding waste, the Council is contributing
 to the Joint Municipal Waste Strategy in partnership with Gateshead and South Tyneside and has
 also recently launched the Refill campaign, to help reduce plastic waste pollution. Finally,
 regarding food, Sunderland City Council has commenced work to further embed sustainability
 standards in catering provision – through the Food for Life and Green Kitchen Standard.
 Opportunities are also being maximised for local growing, a regional feasibility study for
 anaerobic digestion is underway and the Environmental, Green and Sustainable Group has
 provided ideas to reduce food waste.

Submit your response

What language are you submitting your response in?

English

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I have read and accept the Terms and Conditions

Please confirm how your response should be handled by CDP.

	Public or non-public submission
I am submitting my response	Publicly (recommended)