



A large, stylized illustration on the left side of the page depicts a sustainable city. A large, multi-colored rainbow arches over a scene featuring wind turbines, modern buildings with solar panels, and green spaces. In the foreground, orange silhouettes of people are shown walking and cycling on a path. The background is a light blue gradient.

2030 CLIMATE STRATEGY

*Delivering a Net Zero,
Climate Ready Edinburgh*

Draft: June 2021



Net zero, climate resilient development and growth

The city's needs are growing

Like many cities, Edinburgh is growing, with our population expected to increase by 6 percent to **over 560,000 people by 2030**. This will bring new skills to the city and help our communities thrive. Population growth also creates demand for high-quality, affordable housing and new local services and facilities, with the city estimated to require a minimum of **50,000 new homes by 2045**.

We need to be able to meet those needs in a sustainable way which manages demand for land and the creation of new infrastructure such as roads.



Population:

+13 % between 2017 and 2045

- +43% aged 75 and over
- +26% pensionable age
- +12% working age
- *Stable* children population



Households:

+21% between 2018 and 2045
(~ 49,000 new homes)

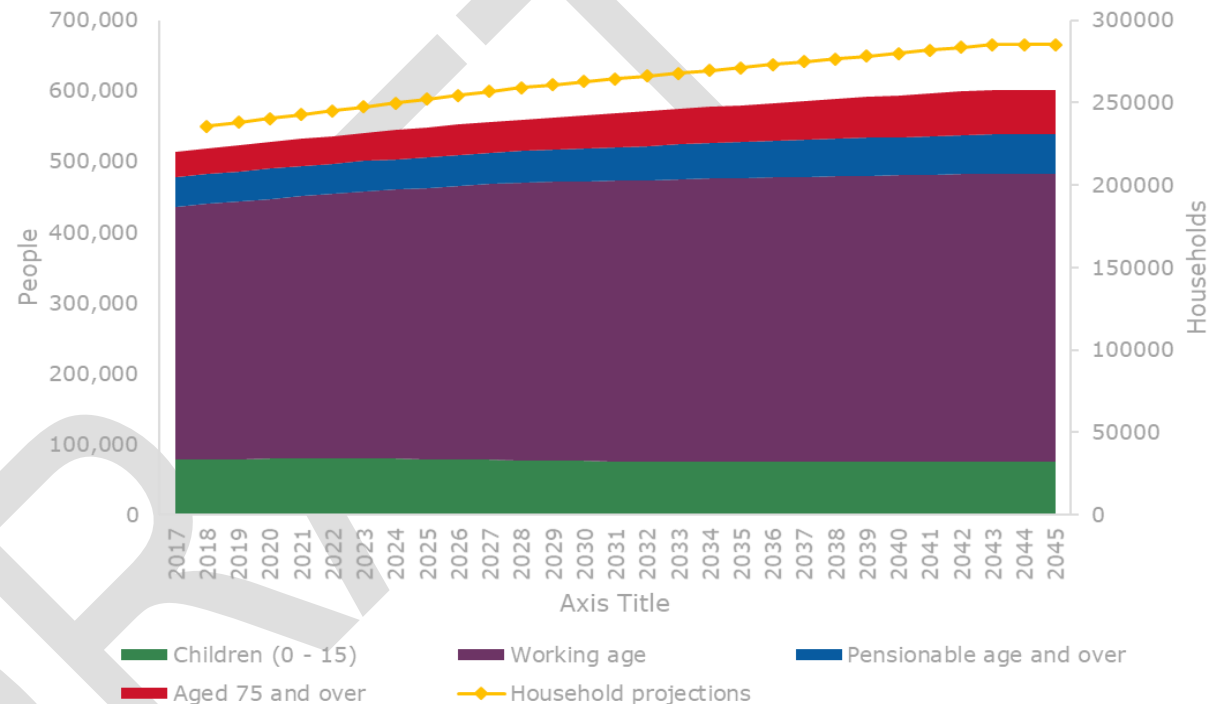


Figure 12: Population projections for Edinburgh by 2045 [NRS Scotland - Population Projections for Scottish Areas (2018-based): Data Tables. Table 3]

Figure 11: Population projections for Edinburgh [NRS Scotland - Population Projections for Scottish Areas (2018-based): Data Tables, Table 3]

We need to adapt our places and communities to be resilient to climate change

Climate change will bring increased flooding, coastal erosion and more frequent severe weather – causing damage to property and disruption for citizens. We need to adapt our communities, economy, natural and built environment to be resilient to the unavoidable impacts of climate change.

Development can secure social climate and economic benefits for the city

In developing the city sustainably, we have an opportunity to ensure investment in infrastructure delivers social, climate and economic benefits. We have choices about where and how this development is delivered, and an opportunity to ensure it creates local jobs and skills opportunities, uses innovative construction methodologies to minimise emissions and re-invigorates the city's urban environments.

Our vision for 2030

We will create resilient places and spaces for low-carbon living

We will provide for Edinburgh's population growth, by re-using land that has already been developed (i.e. brownfield or vacant land). The city will grow sustainably,

improving biodiversity across the city and the public health of citizens.

Our residents will live in high-quality net zero affordable homes that are resilient to climate change, in thriving low-traffic neighbourhoods that meet their everyday needs – whether that be for work, family or leisure time and reduce the need to travel to other parts of the city.

New developments will provide new and better spaces for leisure, nature, and community food growing that improve residents' wellbeing and quality of life.

Edinburgh will be cleaner and have more greenspaces and natural habitats that we allow to flood periodically, as a way to help manage increased rainfall. People's gardens will have fewer hard surfaces and more natural space to help rainwater drain and provide habitats for wildlife. Natural habitats will be preserved across the city to help improve air quality, increase the variety of plants and wildlife, and protect the city from flooding and other climate change impacts.

Our strategic approach

To ensure the city is able to grow sustainably, we will set **high development standards** and put in place new planning policies that **enable net zero growth** through a new local development plan – designing in **climate resilience** and

biodiversity enhancement to deliver a 'climate ready city'.

We will prioritise **re-using land** that has already been developed to protect the city's greenspaces; test **innovative approaches to resilient net zero development**; and roll out place-based approaches through **20-minute neighbourhoods** which support citizen wellbeing.



Understanding the risks climate change presents for the city

We know that climate change will impact on all sectors of the city, but we do not have sufficiently robust and detailed data driving investment decisions.

We will carry out a city-wide climate change risk assessment and economic analysis so that we understand the costs of failing to adapt, and the wider economic and social benefits that adaptation projects can deliver – using this to provide a robust evidence base for investment.



Working in partnership to deliver a whole-city approach to adaptation

City and region partners will work together to tackle regional and cross-border climate impacts, including coastal and river flooding, damage to infrastructure and transport disruption. Where possible, this will prioritise 'nature-based solutions' such

as rain gardens and flood plains – helping to protect and enhance our natural and built environments.

As the next phase of Edinburgh Adapts¹, the Council will convene city and regional partners to collaborate on a long-term 'Climate Ready Edinburgh' plan.



Delivering a transformed city centre

In 2019, the Council set out a ten year 'City Centre Transformation Programme' which will see the heart of the city re-designed to deliver cleaner, greener public spaces which prioritise access for walking, wheeling and cycling, and public transport. The economic recovery of the city centre post-pandemic will be a focus of a refreshed Edinburgh Economy Strategy, incorporating a specific City Centre Recovery Action Plan.

Future city development will ensure social, economic and climate benefits are evenly distributed beyond the city centre, by developing connected and climate resilient net zero neighbourhoods that strengthen local economies and improve people's health and wellbeing.

¹ [Edinburgh Adapts \(2016-2020\)](#) was Edinburgh's first vision and action plan to adapt and prepare the city for the impacts of unavoidable climate change.

Case Study: Using blue and green infrastructure to reduce flood risk

Rain gardens significantly reduce flood risk, protect rivers and waterways, and provide wildlife habitats by capturing water and slowing the rate at which it enters the drainage system. The Royal Botanic Garden Edinburgh is using its rain garden to manage flooding across the garden and to study what trees, shrubs, and wildflowers are best suited for rain gardens.

Similar to rain gardens, Edinburgh has a number of green roofs and hollows that provide nature-based solutions to intense rainfall and flooding, and [10,000 Rain gardens for Scotland](#) mapping these sites.

Source: [Royal Botanic Garden Edinburgh \(RBGE\)](#)



Ensuring our buildings, homes and infrastructure are climate resilient

We will lay new planning policy foundations in the City Plan 2030.²

We will work with property owners, developers and the construction sector to

² Local Development Plans are prepared through a statutory process. Edinburgh's City Plan 2030 due

improve design and the quality of buildings, to support climate resilient place-based approaches to development and infrastructure. This will include utilising green and blue infrastructure (such as green roofs and urban ponds) and permeable surfaces to reduce flood risk and improve air and water quality.

Working with Edinburgh World Heritage and Historic Environment Scotland, we will develop a plan to adapt Edinburgh's UNESCO World Heritage site to be resilient to climate change in a way that protects its heritage values.

Investing in housing

The Council plans to spend £2.8 billion of capital investment over ten years to deliver 10,000 new sustainable and affordable homes by 2027, and to modernise existing Council-owned homes to be energy efficient

Source: [City of Edinburgh Council Budget 2022/23](#)

to be submitted to the Scottish Government for examination in 2022 and adopted in 2023.



A new approach to urban living

Through the City Plan 2030, the Council will work with developers, investors and landowners to deliver climate resilient net zero development in the city – ensuring that wherever possible housing demand and other development needs are met by re-using land that has already been developed, helping to manage pressure on greenfield land.

This means that more new developments will be higher density and mixed use, in sustainable locations, with easy access to jobs and services.

Neighbourhoods like these will help cut emissions by reducing the need to travel and will create markets for new local businesses, helping to create more local jobs and strong local economies that build community wealth.



Low carbon affordable housing

Through a 10-year strategic housing investment plan, the Council will lead the way in ensuring all major new Council-housing is constructed to a new net zero design brief, which includes use of low and zero carbon technologies as an alternative

to gas boilers. This will be ahead of the Scottish Government 2024 deadline for new builds to have zero emissions heating systems.³

We will work with national and local partners, to deliver an Edinburgh Homes Demonstrator that tests off-site construction methodologies and will roll out success across city region partners' housing pipelines.

Making the most of nature

The Council is committed to improving our parks, food growing sites and urban forests, and has secured £4.5 million of capital investment in 2022/21 to support this.

Source: [The City of Edinburgh Council Budget 2022/23](#)



Prioritising water management and nature-based solutions to climate impacts

We will prioritise nature-based solutions to water management, carrying out a Strategic Flood Risk Assessment to understand the risk to the city's homes and delivering a long term and sustainable

approach to water management across the city.

We will create a 'green and blue network' of connected waterways, greenspaces, and active travel routes that will provide enhanced environments for citizens and protect the city's wildlife.



Innovation in city development

We will **deliver ambitious net zero developments at Granton Waterfront and the BioQuarter**, creating centres of excellence and using green and blue infrastructure, like living roofs, ponds and rain gardens, which enhance the city's natural habitat and build communities that are resilient to flooding and other impacts of climate change.

City partners will work with the development sector and research and innovation partners to test and develop innovative approaches to construction, energy generation, and community wealth-building.

This network will be complemented by an Ecological Coherence Plan and Edinburgh Million Tree City initiative to provide nature-based solutions to flooding, improving air quality and reducing the

³ [New Build Heat Standard: scoping consultation, Scottish Government, December 2020](#)

urban heat effect through shading and cooling.

We will deliver development frameworks that adapt the city's coast to be resilient to climate change. We will begin with the delivery of a **new coastal park** as part of the **redevelopment of Edinburgh's Waterfront** that will create jobs and provide high-quality greenspaces, supporting biodiversity and providing outdoor recreation space.



Building resilient communities by re-designing services to localise support

By joining up services and thinking differently about how buildings are used, we can free up resources to invest in our best buildings to make them more energy efficient and develop them as 'community hubs' where people can access a wider range of services locally.

We will work with public, community and voluntary sector partners over the next 10 years to radically re-design services across local hubs in line with the 20-minute neighbourhood model (see Figure 13).

This will deliver improved services to areas experiencing inequalities; focus on natural town centres; and ensure more rural communities can access services with minimal travel.

Figure 13: Features of a 20-minute neighbourhood



Net Zero Development and Growth

Outcomes

- People can access the support they need in the places they live and work and local neighbourhoods are resilient to the impacts of climate change.
- City development and investment deliver net zero growth and economic opportunities that protect and enhance the environment.
- The city's wildlife is thriving, and biodiversity is enhanced, protecting the city's ecosystem and helping absorb carbon.

Action	Next steps and Indicative delivery timeframe	Partners
1. Long term planning on climate risk and cost	<ul style="list-style-type: none"> The City of Edinburgh Council will convene city and region partners to collaborate on a long-term '<i>Climate Ready Edinburgh</i>' plan. 2021-2022 Undertake a city-wide climate change risk assessment and cost analysis. 2021-2022 	National and Regional planning partners, Edinburgh Adapts Steering Group, Edinburgh Climate Change Institute, Adaptation Scotland
2. Laying the policy foundations	<ul style="list-style-type: none"> Set new planning policy and guidance within the City Plan 2030 Work with developers, investors and landowners to deliver net zero development of the city. 2021-2023 	City partners, The City of Edinburgh Council, Edinburgh Biodiversity Partnership, The Scottish Government, private sector developers, construction industry, Edinburgh Living Landscape Partnership
3. Re-designing services to meet citizen's needs locally	<ul style="list-style-type: none"> Re-design services and amenities to deliver sustainable 20-minute neighbourhoods across hub locations 	NHS, higher education sector, voluntary sector organisations, Police, Fire
4. Leading the way on net zero development	<ul style="list-style-type: none"> All new Council-led housing developments with the 10-year sustainable housing investment plan will be net zero. 2020-2030 Deliver an off-site net-zero construction methodology demonstrator project. 2021 - 2023 	The Scottish Government, Scottish Futures Trust, Construction Scotland Innovation Centre, Edinburgh Napier University, and Offsite Solutions Scotland

5. Using blue and green spaces to protect communities from climate change	<ul style="list-style-type: none"> Deliver a network of green and blue spaces across the city which help protect our communities from climate change impacts, provide active travel routes, and protect and enhance the city's natural environment and biodiversity. <i>Strategic Flood Risk Assessment 2021, Green/Blue Network 2021–2023</i> 	The City of Edinburgh Council, Lothian Strategic Draining Partnership, Edinburgh Living Landscape Partnership
6. Meeting adaptation challenges with nature-based solutions	<ul style="list-style-type: none"> Deliver nature-based solutions to the impacts of climate change, beginning with the Edinburgh Million Tree City initiative. <i>2022-2030</i> Develop an Ecological Coherence Plan for the city. <i>2021</i> 	The City of Edinburgh Council, Edinburgh Biodiversity Partnership, Edinburgh Living Landscape Partnership
7. Develop a long-term and sustainable approach to water management across the city	<ul style="list-style-type: none"> Deliver a Water Management Vision and Strategy identifying the risks and co-ordinating actions to alleviate impacts from all sources of flooding in the city. <i>2021– 2030</i> Integrate design for water and flooding within the urban landscape using blue-green infrastructure. <i>2021– 2030</i> 	Edinburgh and Lothians Drainage Partnership (The City of Edinburgh Council, SEPA, Scottish Water)
8. Protecting the City's coast	<ul style="list-style-type: none"> Adapt the city's coast to be resilient to climate change, beginning with delivering around 200 hectares of new and enhanced coastal park in north west Edinburgh. <i>2024 - 2030</i> 	The development sector, The City of Edinburgh Council, University of Glasgow, Transport for Edinburgh
9. Delivering rapid whole-system change	<ul style="list-style-type: none"> Call on the Scottish Government to use the lessons from responding to Covid to enable accelerated local action and decision making on tackling the climate emergency. <i>2021– 2023</i> 	The City of Edinburgh Council, The Scottish Government
10. Shared risk-taking to develop innovative solution	<ul style="list-style-type: none"> Call on the Scottish Government to collaborate with the City of Edinburgh Council on shared risk-taking to develop innovative solutions to tackling climate change - for example by exploring regulatory 'sandboxes' for key demonstration projects to support the testing of new approaches within more permissive and flexible frameworks. <i>2021 - 2030</i> 	The City of Edinburgh Council, The Scottish Government
11. Embed net zero requirements	<ul style="list-style-type: none"> Call on the Scottish Government to embed net zero requirements into new and existing policy, legislation, regulations and statutory guidance. <i>2021</i> 	The City of Edinburgh Council, The Scottish Government