City Plan 2030 Environmental Report: Non-Technical Summary

Introduction

The City of Edinburgh Council has published the Main Issues Report (Choices for City Plan 2030) for the replacement Local Development Plan (City Plan 2030). Once adopted the City Plan 2030 will guide development throughout the Council area until 2032.

This Environmental Report forms part of the Strategic Environmental Assessment of the City Plan 2030 and is a requirement of the Environmental (Scotland) Act 2005.

The report highlights any significant effects that land use change and development brought about by the policies and proposals contained within the Choices for City Plan 2030, may have on the environment. In addition, the Strategic Environmental Assessment process has helped to inform the preparation of the Choices for City Plan 2030.

Population and Human Health

The total population of Edinburgh has risen to 518,500 in 2018 and is projected to increase by 15% or 75,965 between 2016 and 2031. In 2018 there was a total housing stock of 248,300 dwellings of which approximately 8% are local authority properties. An emerging public health priority in Edinburgh, is dealing with poor air quality. This is primarily caused by road transport emissions of gases such as nitrogen oxides (NO_x) and particulate matter ($PM_{2.5}$ and PM_{10}). These can have significant impacts on health, child development and environmental quality. In Edinburgh this is estimated as equivalent to 153 attributable deaths in the same year.

Material Assets

Generally, Edinburgh is well served by public transport with an extensive bus and rail network and developing tram and park and ride network. However, with a growing population, there is increasing pressure on public transport services. Many people travel to work by car causing traffic congestion and significant pressure on parking spaces. There are a number of emerging Council transport schemes which will help improve existing public transport infrastructure including the extended tram route and additional park and ride sites.

Edinburgh has an extensive network of off-road footpaths and cycle paths laid out over the past two decades, utilising in particular former railway alignments or following the banks of the city's watercourses. The area is traversed by a series of core paths that form the Core Path Network across the city.

Soil and Land Use

The majority of farmland in the area is classified as prime agricultural land with the majority also within the Edinburgh Green Belt. Edinburgh has a relatively low incidence of vacant and derelict land compared with other Central Belt authorities. High land values and pressures for development means that land tends to be re-used quickly. However, there are significant areas of vacant and derelict land in clusters including Newbridge and parts of the waterfront.

Water

Edinburgh is drained by a number of relatively short rivers which generally flow from south west to north east, rising in and around the Pentland Hills and discharging into the Firth of Forth. Principal among these is the Water of Leith, which flows through the heart of the city. The Water of Leith has been subject to intermittent flooding since people first settled in the area. However, this has become more of an issue with the increasing number of people living in close proximity. The Murrayfield, Roseburn and Gogar Burn (around the airport) areas have a history of flooding and flood prevention schemes have been implemented to reduce the risk. In addition, due to the extent of hard surfacing within the urban area, there is a significant risk of surface water flooding events.

Cultural Heritage

There are two World Heritage Site designations in Edinburgh, the New and Old Town World Heritage Site and the Forth Rail Bridge. Edinburgh has the largest concentration of listed buildings in the UK outside London (4,824 listings), 50 conservation areas, 56 scheduled ancient monuments and 17 historic gardens and designed landscapes.

Landscapes

Edinburgh has numerous outstanding features within easy reach of the City Centre: Holyrood Park including Arthurs Seat and Salisbury Crags, the Braid Hills and Blackford Hill, Corstorphine Hill and the Pentland Hills. These are designated as Green Belt and also as Special Landscape Areas. The Green Belt around Edinburgh was first established in 1957 and it has been an important tool in managing the City's growth and supporting regeneration.

Review of Environmental Issues

- Loss of prime agricultural land through development.
- Possible future decreases in air quality/need to encourage more sustainable forms of transport.
- Need to adapt to predicted climate change and its potential impacts.
- Need to protect and improve the water status of major waterbodies and avoidance of flood risk and areas which could contribute to flood risk.
- Edinburgh's rich cultural heritage is under significant development pressure. There is a need to protect the cultural heritage from the negative impacts of development.
- Edinburgh has a unique landscape setting surrounded by hills and open countryside and landscape features contained within the urban form. There is a need to protect these features from inappropriate development.
- The social, economic and physical environmental conditions in Edinburgh are variable and therefore do not provide a consistent quality of environment adequate to ensure good standards of public health across all areas and communities.

Summary of Assessment Findings

All the choices for City Plan 2030 have been assessed both the preferred and reasonable alternatives. Environmental objectives are well reflected in the preferred Choices which are generally expected to have a positive or neutral/no significant interactions. The exceptions are

Choice 12: Building our new homes and infrastructure, which has unknown impacts associated with the redevelopment of brownfield sites and Choice 14: Delivering West Edinburgh, which has unknown impacts as a result of it not being clear at this stage as to which sites will be brought forward for development. In order to address this the ER identifies the need for mitigation through the preparation of site briefs/master plans and appropriate assessments.

Some of the reasonable alternative choices are expected to have significant negative environmental effects, specifically Choice 12: Building our new homes and infrastructure and Choice 15: Protecting the City Centre, Town and Local Centres. With regard to Choice 12 this relates to the development of greenfield sites which are expected to have a more significant impacts than brownfield sites. Some of these impacts, for example the impact on air quality, potentially could be addressed through appropriate new transport infrastructure to reduce the risks of additional car trips but other impacts such as the environmental effect for soil cannot be mitigated.

The report also assesses 144 brownfield sites and 13 greenfield sites that have been identified in the Choices document for housing led mixed use development. It is not clear at this stage which brownfield sites will be included within the Proposed Plan and therefore the SEA has assessed all the sites. This assessment is considered a comprehensive assessment of all potential land within the built up area. Inevitably, given that a significant part of the of the city has historic status, a lot of these sites have potential environmental impacts. Mitigation has been identified for each site, for example the preparation of detailed site briefs, and that mitigation will be used to inform the preparation and content of the Proposed Plan.

The 13 greenfield sites are a subset of the full list of greenfield sites analysed in the separate Housing Study and are considered as potential reasonable alternatives in the event of the preferred option, brownfield sites only, not being taken forward. All of these greenfield sites have potential environmental impacts which will have to be taken into account in the preparation of the Proposed Plan and appropriate mitigation has been identified.

The Environmental Report also identifies cumulative effects of development sites, those internal to Edinburgh and external effects, i.e. cross boundary with adjacent authorities. The internal effects include impact on human health by increasing the number of people exposed to poor air quality, the effect of increased vehicle trips on air quality, impact on soils, particularly from greenfield development, and the landscape impacts of large greenfield developments. With regard to external effects there is an unknown risk associated with an increase in commuter vehicle trips from surrounding council areas and their impact on existing air quality management areas. Finally, there is also a potential cross boundary landscape risk should other councils propose further development in the future that is adjacent to the Council boundary.