

Policy and Sustainability Committee

10.00am, Tuesday, 21 March 2023

Extreme Heat, Climate Adaptation and Resilience

Executive/routine
Wards
Council Commitments

1. Recommendations

It is recommended that the Policy and Sustainability Committee:

- 1.1 Note the resilience measures that are being taken to future proof the city from the effects of extreme heat and climate change.
- 1.2 Note that a Draft Climate Ready Edinburgh Plan for consultation is under development and expected to be presented to the Committee in August.

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Extreme Heat, Climate Adaptation and Resilience

2. Executive Summary

- 2.1 This report details the Council's response to extreme heat, climate adaptation and resilience, following a Motion at Full Council on 25 August 2022 by Councillor Parker ([Item 8.20](#)).

3. Background

- 3.1 As set out in the [2030 Climate Strategy](#), it is vital that the city adapts to the current and future impacts of climate change such as rising temperatures and sea levels and the heat island effect experienced by cities across the globe.
- 3.2 Heat is an emerging climate risk for Edinburgh. As detailed by the Met Office, the latest [UK Climate Projections 2018](#) (UKCP18) shows that over the last few decades temperatures have increased. The last decade was the warmest on record. UKCP18 provides the most up-to-date and appropriate climate change scenarios for understanding climate change in Edinburgh.
- 3.3 The long-term projected climate change trends in Edinburgh in relation to heat are:
- 3.3.1 Average temperatures will increase across all seasons.
 - 3.3.2 Typical summers will be warmer and drier. Average temperature increases could exceed 5°C in summer months by the 2070s under the high emissions scenario. Temperatures of 35°C or above are possible.
 - 3.3.3 Heatwaves are projected to become around 4 times more frequent in the latter half of the 21st century
 - 3.3.4 Typical winters will be milder and wetter
 - 3.3.5 As global average temperatures increase, we will also experience rises in sea level rise around Edinburgh's coast
- 3.4 On 25 August 2022, the Council approved a motion by Councillor Parker that sought an update to the work of Edinburgh Adapts on climate resilience and information on measures to accelerate efforts to adapt the city. This report addresses that motion.

4. Main report

4.1 Climate Adaptation Plan

- 4.1.1 The Edinburgh Adapts Partnership is in the process of reviewing a Draft Climate Ready Edinburgh Plan 2023 – 2030 for consultation. This will follow on and supersede the previous [Edinburgh Adapts 2016-2020 strategy](#).
- 4.1.2 The Climate Ready Edinburgh Plan 2023-2030 consultation draft will set out the short, medium and long-term actions that are required to adapt Edinburgh to the impacts of climate change. The plan is informed by an updated climate change risk assessment and is expected to be presented to the Committee for approval in August 2023.
- 4.1.3 The draft Plan will outline the measures needed to accelerate efforts to adapt the city to climate change, incorporating Council and partner actions. The consultation process will help to further develop and refine these actions and broaden partner involvement in them. The Climate Ready Edinburgh Plan will be delivered by the Edinburgh Adapts Partnership. A work programme for the Partnership will be developed to support this.

4.2 Increasing greenspace and canopy cover to lower temperatures

- 4.2.1 Provision of new greenspace is often tied with development or regeneration. Both of which occur across the city, for example, new housing developments to the south and west of the city and regeneration schemes such as the Granton Waterfront. Canopy cover is improved by the planting of more trees and protecting existing ones. The Edinburgh Million Tree City project aims to plant around 250,000 new trees in the city by 2030. An update report to the Culture and Communities Committee on this project can be found [here](#).
- 4.2.2 The [Trees in the City Strategy](#) also highlights the Council's approach to maintaining existing trees. Work in the planning service is also looking at improving canopy cover in individual developments.

4.3 Management and Maintenance of public parks (grass cutting, tree watering)

- 4.3.1 A report to Culture and Communities Committee set out the ongoing plans for the maintenance and management of trees across the city in both 2021 and 2022. Further details on this can be found in paragraph 8.3 of this report.
- 4.3.2 Projects such as [Living Landscapes](#) and work on the Landscape Quality Standards set out how the Council intends to adapt maintenance regimes to improve biodiversity and make parks and greenspace more resilient to the impacts of climate change. Adapting to climate change will require future changes to maintenance operations and investment in new machinery.

4.4 Measures to restrict barbequing in parks and open spaces during periods of extreme heat

- 4.4.1 Restricting barbequing in parks and green spaces during periods of extreme heat relies on changing people's behaviour and also having the appropriate mechanisms and resources in place to implement park management rules.

Additional concrete slabs have been installed in several parks to prevent grass from becoming scorched. The Council is due to review existing Park Management Rules and proposals will be reported to Culture and Communities Committee in the summer of 2023.

4.5 Provision of water points and public toilets

- 4.5.1 Provision of drinking water (and refilling of water bottles) have been installed by Scottish Water across [six locations within the city](#) (Grassmarket, Rutland Place, Royal Mile, Scottish Parliament, Leith Links, Portobello Promenade). Within parks, provision of drinking water points requires more work and investment. Providing safe water drinking points requires regular testing, too. The addition of cafes, concessions, and facilities in parks and green spaces does provide some opportunity for users to access safe drinking water. The Council have also been looking at installing watering points so that friends of parks groups and others can water plants and trees during the summer period.
- 4.5.2 As temperatures increase it is likely that there will be increasing numbers of people making use of outdoor recreational areas and therefore require access to facilities. The Council has provided funding over the last two years for temporary summer toilet provision at Inverleith park, the Meadows, and Leith Links to address the lack of suitable facilities available to the public at these locations. When opportunities arise, the Council has sought to add public toilet provision to existing buildings when leases come up for renewal. For example, a public toilet provision has been incorporated in the proposed new lease for the bowling club at Inverleith park. Public toilets are best linked to other facilities to reduce issues associated with anti-social behaviour.

4.6 Provision of benches and other rest points

- 4.6.1 Benches and other rest points are provided in many of the Council's parks and green spaces. Additional provision may be highlighted through the Council's annual parks quality assessments, and where resources allow, new benches or seating will be installed. Other park facilities also provide suitable rest locations, for example, kiosks or cafes, low walls, etc. Informal seating can also be installed, such as carved tree trunks or rocks in more naturalised settings. The Council's presentation seat scheme also supports the provision of seating within the parks and greenspace estate and donors will continue to be encouraged to site benches at locations where there is a demand for rest points. Bench designs that offer protection from direct sun can also be considered as part of this scheme.

4.7 Reviewing and changing the fabric of buildings in the city, including exploring the possibility of introducing restrictions around material choices for new builds

- 4.7.1 The Council as Building Standards Verifier, has no control over which materials are considered acceptable when determining building warrants. Any restrictions would need to be set out in the Scottish Government's technical handbooks which guide how the Building Regulations can be met.

4.7.2 In relation to Planning, there are limits to how the Council can control materials as decisions need to take account of what Planning can control. External materials will be considered but that consideration is often focussed on how the external materials fit into the wider context. The external materials influence but would not necessarily have a fundamental impact, on for example, energy efficiency. The National Planning Framework 4 and the emerging Local Development Plan, City Plan 2030, place an emphasis on sustainable building and climate change. The NPF4 places a strong focus on the Nature and Climate emergencies with:

- Policy 1 - Tackling the climate and nature crises – which prioritises climate and nature crises in all decisions.
- Policy 2 - Climate mitigation and adaptation – which focuses on reducing emissions from new buildings as far as possible.
- Policy 3 – Biodiversity – which takes into account impacts on nature.

4.7.3 If buildings are to meet zero carbon objectives, it is likely that Planning will, as part of the application assessment, require information on how this will be done and the fabric first approach of highly insulating buildings so that their thermal performance is good, is often the starting point. Therefore, as part of this emerging policy context, it is expected that developers will have to consider materials in the context of the issues of climate adaptation and resilience.

4.8 Measures to limit private vehicle use during periods of extreme heat

4.8.1 The Council has ambitious targets, policies and actions in the [City Mobility Plan](#) to reduce car travel with an overall target to reduce car kilometres by 30% by 2030. While this is principally to support carbon reduction, reduce congestion, and deliver the many other benefits of moving to more active/sustainable travel, it could also have a bearing on reducing the reliance on private car use in extreme heat. Moving forward, the Council will ensure that issues of climate change, and its link to car travel, are embedded in the relevant messaging in awareness raising, behaviour change and campaigning that is already happening to support programmes and projects, including ongoing net zero 2030 behaviour change/awareness-raising activity.

4.9 Public health messaging and interventions such as sunscreen for children and other vulnerable residents

4.9.1 Advice on the use of sunscreen is issued as required as a response to severe weather. Through Education and Children's Services support is given to young people in Council care to ensure awareness of the dangers of severe weather and ensure there is adequate supplies of sunscreen in children's homes.

4.9.2 Vulnerable residents can also access further advice via the Council's website where social work can be contacted for [support](#).

4.10 Guidance around flexibility within the work and school day, and guidance for safe working temperatures for Council employees and others

- 4.10.1 The Education Severe Weather Plan includes details on workplace temperatures (guidance suggests minimum 16 degrees and 13 degrees for outdoor work, there is no maximum temperature, so decisions are based on comfort and welfare). If for example there are heating issues which can't be resolved and the temperature is under 16 degrees for a prolonged period, a closure risk assessment would be undertaken, discussed with the Senior Education Manager and the school would close. If the situation was reversed and the school was too hot the same process would occur.
- 4.10.2 During the summer of 2022 when temperatures were particularly high, the Education and Children service shared guidance with staff on keeping themselves and children cool (this was shared with Early Years as they are open during the school holiday which is when the hot weather occurred). This information is included within the Education Severe Weather Plan which all Headteachers and Business Managers are briefed on annually.
- 4.10.3 Any activities undertaken with service users through the Council's Justice Services are risk assessed prior to commencement of any project. A daily risk assessment is also undertaken, known as the Take 5 principle for each project at the beginning of each working day and throughout the day should conditions change; this includes assessing temperatures and ground conditions. This is done in addition to detailed risk assessments to ensure the conditions of the day have been accounted for and considered prior to any activity.

5. Next Steps

- 5.1 Services will continue to review policies and resilience plans for climate adaptation measures to ensure the city is prepared for extreme heat and climate events in the future.

6. Financial impact

- 6.1 Details of the financial impacts of climate adaptation measures have been included in a supporting briefing note to Members. A full economic assessment for climate adaptation is expected to be delivered in 2023/2024.

7. Stakeholder/Community Impact

- 7.1 Delivery of the draft consultation for the Climate Ready Edinburgh outlined in this report will include consultation with council services, key stakeholders and the public.
- 7.2 Ensuring the city is well adapted to current and future climate change impacts is in line with the aims of the 2030 Climate Strategy.

- 7.3 Equality and rights are a key component of adapting Edinburgh to the impacts of climate change. The responses in this report are underpinned by principles including being inclusive, engaging and sustainable

8. Background reading/external references

- 8.1 Edinburgh [Million Tree City Progress report](#) – January 2021
- 8.2 Edinburgh [Million Tree City Progress report](#) – April 2022
- 8.3 [Update on current arrangements for tree management and maintenance – Response to Motion by Cllr Osler – Trees – December 2022](#)
- 8.4 Edinburgh.gov.uk [Website](#) – Support during severe weather

9. Appendices

None