

Southend-on-Sea City Council

Agenda
Item No.

Report of Executive Director John Burr

To

Cabinet

On

12th January 2023

Report prepared by: Jo Gay, Interim Head of Waste and
Climate Change

Climate Change Programme Update

Relevant Scrutiny Committee: Place
Cabinet Member: Councillor Carole Mulroney
Part 1 (Public Agenda Item)

1. Purpose of Report

- 1.1 The purpose of the report is to provide an update to Cabinet on the activities in the Council's Climate Change Programme.

2. Recommendations

- 2.1 **To note the update of the Council's climate positive activities as related to the five focus areas of the Green City Action Plan.**

3. Background

- 3.1 Southend-on-Sea City Council (SCC), declared a climate emergency in 2019 with the aim of achieving net zero carbon by 2030 for both the City and council operations. The target being 20 years ahead of national government shows the council's commitment and ambition.
- 3.2 Since the emergency was declared, officers have been working across a breadth of climate adaptation, stakeholder engagement, coastal resilience and carbon mitigation policies, strategies and projects. The Council also benefits from relationships and partnerships with international, national and local stakeholders. The knowledge shared and gained through access to global expertise with governments, academia, industry experts, and community activists is extremely positive for the programme.
- 3.3 Over the past 12 months, the organisation has focussed on developing and consolidating a robust evidence base. This approach ensures that that the programme prioritises measurable climate positive outcomes, which support the trajectory to net zero and climate resilience whilst managing resources and finances appropriately.

- 3.4 Climate Change is a corporate priority for the Council and the further development of the climate change programme will be aligned across corporate objectives, as well as statutory and regulatory requirements.
- 3.5 Climate positive action is embedded across corporate activity. This meeting's agenda seeks approval to go to public consultation on the draft Heat Stress Strategy (Item no X) which identifies locations which are less resilient to heat stress and appropriate mitigation measures. The Grassland Management Strategy (Item no X) sets the Council's strategic direction on pollinators and both documents support the climate adaptation and resilience in the City.
- 3.6 As part of the waste procurement, (Item no X) the technical team are ensuring that carbon reduction features prominently in the tender process. Bidders will be required to demonstrate a cradle to grave commitment to the council's net zero carbon target

3.7 Externally Funded Projects.

- 3.7.1 The Council benefits from participating in a range of externally funded projects which bring together global knowledge and expertise that underpins carbon mitigation and climate adaptation activity.
- 3.7.2 The REMeDY project, which ended in May 2022, was part funded by UK Research and Innovation (UKRI) - a non-departmental public body sponsored by the Department for Business, Energy and Industrial Strategy (BEIS). The project was led by SCC with a consortium of partners. Working together, the aim was to bring affordable low carbon heating to residents and businesses in Southend, using a business model which can be replicated across the UK. This project has delivered an extensive amount of carbon data and energy modelling which is the foundation for the city-wide trajectory to net zero carbon. REMeDY was project managed by the Climate Change Team
- 3.7.3 'Cool Towns' is a recently completed, EU funded project, partnering cities as well as research and academic institutions across France, Belgium, the Netherlands and the UK, that sought to combat urban heat stress. This climate adaptation project funded a range of measures which reduced the impact of flooding and heat stress in a pilot project on London Road including rain, gardens, trees as well as delivering the Council's draft Heat Strategy which will support corporate policy and strategy development. 'Cool Towns' is a project managed by the Climate Change Team with operational delivery lead by the Civil Engineering Team.
- 3.7.4 The Nature Smart Cities project, (EU funded), aims to support cities to invest more in green infrastructure. Eight city and three academic partners in the UK, Belgium, The Netherlands, and France have joined forces to develop a business model which local authorities can use to promote green infrastructure solutions, bridging the gap between research and practice. The Business Model is based on evidence collected through interviews with local authorities and analysis of geographical, biophysical and economic data. Southend is the lead partner for Nature Smart Cities which is project managed by the Climate

Change Team, with operational delivery on the pilot site (LaunchPad), led by the Architecture Team.

- 3.7.5 The aim of the PlastiCity project is to increase commercial and industrial recycling rates across cities in England, The Netherlands, France and Belgium. Cities in these countries experience similar rates of recycling and the collaboration allows for thought leadership and shared opportunities to be developed. Each city participating in the project has a different focus. Southend was looking at stakeholder responses and capacity building. PlastiCity is project managed by the Climate Change Team in collaboration with the Waste Team.
- 3.7.6 The Council is the lead partner on the Sustainable and Resilient Coastal Cities (SARCC) project, which is improving the understanding of Nature-Based solutions in coastal cities. 14 project partners (including the Environment Agency), are working together with the objective of mainstreaming Nature Based Solutions (NBS) into coastal management. Across the partnership, NBS are being installed as standalone projects or integrated into existing grey infrastructure. There is also a tranche on capacity building to ensure that policies supporting NBS are embedded into future coastal management practice. SARCC is project managed by the Climate Change Team with operational delivery led by the Civil Engineering Team to deliver NBS along the coastline.
- 3.8 Leadership and Strategic Approach – the Corporate Leadership Framework that enables Southend to be recognised as a Green City
- 3.8.1 Council operations account for approximately five percent of the total carbon emissions in the City. However, the Council is an important stakeholder within the City and has a responsibility to demonstrate through climate leadership, as well as facilitating and convening climate action across the Southend’s resident, visitor and business communities.
- 3.8.2 The Council is prioritising getting its own house in order, ensuring that all council assets are on green heat and power tariffs and strengthening the officer Green Staff Forum to drive internal climate action at all levels within the organisation.
- 3.8.3 Residents have told us that they are not always aware of the actions that the Council is taking, so we have created a Southend Climate Action microsite – a dedicated accessible digital space to signpost information and resources and share corporate actions. A bi-monthly newsletter is also being developed to share and signpost climate change related activity.
- 3.8.4 Further actions and activities include,
- **Climate and Ecological Emergency Bill:** The Council officially support the CEE Bill introduced in Parliament by Caroline Lucas MP in 2020.
 - **Green Staff Forum:** the Council has strengthened the format and guest speakers and provides a forum for staff (many of whom are residents) to share and learn.

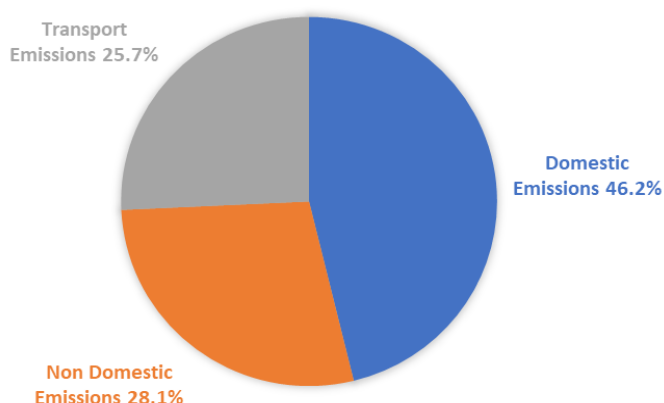
- **Head of Climate Change:** the Council recruited its first Head of Climate Change to drive and embed climate action across the Council and the City.
- **Carbon Disclosure Project (CDP):** in 2022 the Council received 'A' status reflecting the inroads that had been made to reduce emissions over time.
- **Electric Vehicle Feasibility Study:** the Council commissioned an internally facing report that provides the evidence to support the appropriate delivery of electric vehicle charging infrastructure across the City.
- **Draft Heat Stress Strategy:** sets out the areas in the City that are least resilient to heat stress and options for mitigation (*Cool Towns project*).
- **Capacity Building:** the Council led 37 local authorities from across the UK, Natural England, local wildlife trusts, academia to overcome challenges in investment for GI projects to create compelling business cases (*Nature Smart Cities Project*).
- **Utilities Green Tariff:** all council assets moved over to a green tariff giving both financial and carbon savings.
- **Emerging Local Transport Plan 4:** Southend's Transport Strategy that supports decarbonisation and a sustainable Green City agenda.
- **Green Taxi Licensing:** the Council has updated its taxi license conditions to ensure that low and zero emission taxis are proactively encouraged.
- **Electric Vehicle Charging Infrastructure in New Developments Supplementary Planning Document (SPD):** Planning guidance which sets out the electric vehicle infrastructure that new developments are required to provide.

3.9 Establishing a Pathway to Net Zero Carbon - actions that support our ambition to be a net zero carbon City

3.9.1 Carbon footprints are an important tool, as they show the impact of carbon emissions of a geographical area; an individual; a community or an organisation. For the Council, the carbon footprint allows us to define the scale of the carbon mitigation challenge and prioritise action to generate the most significant reductions in the shortest amount of time. Carbon footprints are only as good as the data that is used to model them, and they provide a snapshot of impact. The REMeDY project, produced the first iteration of the footprint in March 2022, the second iteration produced six months later is more refined as more data became available to the team.

Figure 1: Southend on Sea Carbon Footprint

SOUTHEND ON SEA CARBON FOOTPRINT



3.9.2 Emissions in the city come from three main sources:

- Domestic buildings (364,753 tCO₂) or 46.2%
- Non domestic buildings (221,878 tCO₂) or 28.1%
- Transport (203,171 tCO₂) or 25.7%

The carbon footprint models emissions within the administrative jurisdiction of the local authority, so shipping and aviation emissions are not included.

3.9.3 In collaboration with the Operational Performance and Intelligence Team, the Council has developed a range of maps which show carbon intensity, across domestic and non-domestic properties. These provide a visual representation of areas where carbon mitigations measures should be prioritised.

3.9.4 Other carbon mitigation activity includes:

- **Pier Train:** the Council unveiled new battery powered trains to replace the diesel trains and reduce carbon emissions.
- **Recycling:** more than 33,000 tonnes of household waste has been recycled, diverting from landfill and reducing carbon emissions.
- **Solo Haus:** innovative purpose-built low carbon modular homes.
- **Local Energy Advice Partnership:** over 150 referrals which resulted in more than 50 appliances being replaced with energy efficient options 37 energy efficient boilers.
- **Green Home Grant (Local Authority Delivery Scheme):** ongoing project, over 200 photovoltaic array installations delivered through the first tranche of the scheme. Annual carbon savings delivered by the scheme are estimated to be 22,000t CO₂.
- **Launchpad Innovation Centre:** Council development achieving BREEAM Outstanding certification.
- **LoCASE:** over £40,000 awarded to small and medium sized businesses in Southend since 2019 to support energy efficiency improvements.
- Electric Vehicle Scrutiny Group – Councillor led group reviewing options for City wide rollout of electric vehicle infrastructure.

3.10 Building Climate Resilience Across Southend - build and increase the climate resilience of Southend's urban landscape and coastline.

3.10.1 The Climate Change Team work closely with Parks and Open Spaces, Public Health and Civil Engineering across adaptation and resilience projects including,

- **Sustainable Drainage Systems:** the Council installed at Marine Parade to manage flood risk by minimising run off.
- **Urban Heat Stress Strategy:** policy document that identifies key locations for interventions and mitigation of heat stress. (Cool Towns Project).
- **Reclaimed Timber:** the Council used in the refurbishment of the Groyne Field, protecting coastal defences and reducing carbon.
- **Two Tree Island:** the Council has installed green gabian walls grown in the SCC nursery installed on the seafront (*SARCC project*).
- **Old Leigh:** the Council has installed vertipools and piling habitats to reduce wave action and create intertidal habitats (*SARCC project*).
- **East Beach:** Dune stabilisation and restoration with native coastal planting grown at the SCC nursery (*SARCC project*).
- **Old Gas Works:** Vegetated shingle enhancement which supports coastal biodiversity and enhances coastal resilience (*SARCC project*).
- **Eastwood Brook Flood Alleviation Scheme:** reduction of risk of flooding from the brook.
- **Launchpad Innovation Centre:** Green infrastructure at the site promotes climate resilience through 1 x swale of 300sqm, 1 x meadow 1889 sqm, 2900sqm of permeable paving 47 trees and additional hedges.
- **Tree Planting:** The Council planted over 600 trees in financial year 2021/22 (this figure excludes trees planted in new developments and by private landowners and whip and shrub planting).
- **Habitat Enhancement:** the Council has delivered a range of habitat enhancement measures for protected species at Edwards Hall.
- **Pollinator Friendly Planting:** the Council has installed pollinator friendly planting at Chalkwell Park, Southend Cliffs, Leigh Library Gardens, Southchurch Park and The Bell open space.
- **Non-Glyphosate Herbicide Trial:** the Council is currently testing several alternatives to glyphosates.
- **Community Orchards:** the Council created community orchards at Norwich Avenue, Chalkwell Park and Friars Park.
- **Bug Hotels:** the Council has installed bug hotels in Chalkwell Park, Milton Gardens and Leigh Library Gardens.

3.11 Future Generations - actively engaging schools, colleges and youth organisations.

3.11.1 Through the PlastiCity Project, the Climate Change Programme has carried out a range of projects including a hub trial to collect and recycle plastics across six schools in the City, project logo design, and the PlastiCity Pledge where schools are committing to increasing their recycling rates and reducing plastic waste.

3.11.2 Other activities include,

- **Youth Council x Net Zero Carbon:** Event run by the Youth Council showcasing ideas about how to support the city-wide net zero carbon ambition.

- **School Streets:** the Council's multidisciplinary programme includes active travel, school travel plans, traffic calming at school pick up and drop of times, which improves air quality through reduced network congestion and reduces carbon emissions.
- **Schools Energy Efficiency Project:** Council led project that helped to reduce energy use and carbon emissions across 20 schools in the city (*EMPOWER project*).
- **Green Roof:** installed and maintained at Earl's Hall primary school which mitigates the impact emissions.
- **Hydropanels:** Installation of the City's first zero mass water source panels at Southend High School for Boys.
- **School Orchards:** Eleven schools across the City provided with fruit trees (delivered during September and October).

3.12 Building Partnerships - developing solid partnerships to support and co create climate action and sustainability solutions

3.12.1 A snapshot of activity from the past year includes,

- **ECO Days with Trust Links:** 10 face-to-face and eight online events in collaboration with local environmental charity, 'Trust Links', attracting over 400 local residents businesses and stakeholders (*REMeDY project*).
- **Green Love Southend:** engagement initiative to encourage net zero conversations and practical advice on energy efficiency (*REMeDY project*).
- **Plastics Engagement:** 40 businesses engaged in our plastics recycling trial (*PlastiCity project*).
- **Net Zero Carbon Pilot:** SCC is one of three local authorities that is partnering with Nesta and University College London to develop a game which will engage communities on net zero and support decision making.
- **Non-Domestic Energy Management:** Held workshops which supported 24 Businesses and schools improve energy management at their premises (*REMeDY project*).
- **Street Champions:** the Council has recruited 111 Street Champions since April 2022 (now 700 in total), who are supporting their neighbourhood through volunteering to improve the environment.
- **Official Clean Air Day partner:** in 2022, the Council became an official Clean Air Day partner, led by officers from Public Health engagement focussed on schools.
- **Climate Hub:** the Council welcomed more 500 people to the hub in the first 12 weeks that it was opened, and it continues to be a focal point for community engagement.
- **Local Nature Recovery Partnership:** the Council is collaborating with Essex County Council, Thurrock Council, Essex Wildlife Trust, Natural England and partners to develop a regional Local Nature Recovery Strategy.
- **Essex Climate Action Anchor Network:** the Council is a key member of this subregional partnership of local authorities and stakeholders which collaborate across the region.

3.13 Next Steps

3.13.1 There is a significant amount of collaborative activity taking place corporately and this will continue. The Green City Action Plan is going to be reviewed and updated to ensure that there is a clear route for delivery and appropriate performance indicators are established. The Net Zero Carbon trajectory is being finalised and a Net Zero Carbon Energy strategy will be developed from that modelling. Scope three emissions (emissions from the supply chain) will be assessed with opportunities to reduce and mitigate the impact on corporate activity and support the city-wide value chain undertaken. The evidence that is generated through the climate change programme also underpins a wide range of forthcoming corporate strategies including the Local Plan and the Local Transport Plan 4.

4. Other Options

4.1 The report provides an update; no other options are under consideration.

5. Reasons for Recommendations

5.1 To keep the Cabinet informed of the progress of the Climate Change programme.

6. Corporate Implications

6.1 Contribution to the Southend 2050 Road Map

- Pride and Joy – the Corporate Climate Change Programme underpins the sustainable and Green City objective through the five focus areas set out in the Green City Action Plan.
- Safe and Well – the Climate Change Programme is bringing forward low and zero carbon homes and maximising green infrastructure
- Active and Involved – partnership building, and collaboration is at the heart of the Climate Change Programme and provides opportunities for people of all ages to engage on this priority
- Opportunity and Prosperity- the Climate Change Programme supports lifelong learning and curiosity through leadership and community engagement
- Connected and Smart – the Climate Change Programme supports the long-term aspirations to improve transport accessibility and modal shift.

6.2 Environmental Impact

6.2.1 The Climate Change Programme delivers climate positive outcomes which support the City's climate resilience and carbon mitigation objectives set out in the Green City Action Plan.

6.3 Financial Implications

6.3.1 No Financial implications are associated with this report.

6.4 Legal Implications

6.4.1 No Legal implications are associated with this report.

6.5 People Implications

6.5.1 The strategies and projects set out in this report have a positive impact on the communities that live and work in the City as they ensure that their environment is resilient to future changes in climate now and in the future.

6.6 Property Implications

6.6.1 The strategies and projects set out in this report have a positive impact on property and assets in the City, ensuring that they are resilient to future changes in climate and minimise additional carbon intensity.

6.7 Consultation

6.7.1 Consultation has been carried out as required on individual strategies and projects.

6.8 Equalities and Diversity Implications

6.8.1 The climate positive actions set out in this report do not have a detrimental or inappropriate impact on people with protected characteristics.

6.9 Risk Assessment

6.9.1 The climate positive actions set out in the paper reduce the risk of the Council and the City experiencing detrimental impacts of future changes in climate.

6.10 Value for Money

6.10.1 The actions highlighted in this report represent significant value for money, through the direct and indirect improvement of climate resilience and reduction of carbon intensity both for Council operations and across the City.

6.11 Community Safety Implications

6.11.1 There are no Communication Safety implications associated with this report.

7. Background Papers

7.1 Links to the projects highlighted in the report

[REMeDY Project \(netzeroremedy.uk\)](http://netzeroremedy.uk)

[Green Love Southend](#)

[Cool Towns - Cool Towns](#)

[Home - Nature Smart Cities](#)

[PlastiCityProject – Resourcing plastics from the city](#)

[SARCC - Sustainable And Resilient Coastal Cities](#)

[THE Homepage – Climate Change \(southendclimateaction.co.uk\)](http://southendclimateaction.co.uk)

8. Appendices

8.1 There are no appendices.