

AGENDA ITEM

REPORT TO CABINET

February 15th 2024

**REPORT OF CORPORATE
MANAGEMENT TEAM**

CABINET DECISION

Lead Cabinet Member – Councillor Clare Gamble

Environmental Sustainability & Carbon Reduction Strategy (ES&CRS) 2022-32 Monitoring Report

SUMMARY

Climate change poses a real threat to society and biodiversity. We are already seeing the increasing impacts of flooding, high winds, heat waves and species collapse. Efforts to limit climate change by reducing carbon emissions need to be widespread, urgent and sustained.

The Councils Environmental Sustainability and Carbon Reduction Strategy (ES&CRS), adopted in 2023, sets out the direction we need take and describes the actions that would contribute to the achievement of net zero. This report outlines progress since the adoption of the strategy, including reductions in energy consumption and efforts to support biodiversity.

The Council has made significant progress within the resources available, achieving a steady decline in carbon emissions over a longer period. However, substantial additional investment in the coming years, beyond that which is currently identified, will be required if we are to achieve our stated ambition of being a Net Zero authority by 2032

Continued concentration on measures to improve our energy efficiency and reduce emissions from our assets and fleet, are an urgent priority, alongside counterbalancing natural solutions such as tree planting and solar energy generation.

HM Government has entered binding international arrangements for greenhouse gas emissions reduction and set out comprehensive requirements within the Environment Act. The secondary legislation that would define targets for relevant local and regional agencies, has been delayed in a number of key areas. However, we will need, at some point, to show substantial further progress on CO₂, waste, water and air quality, and biodiversity, beyond that which we is achievable within current budgets.

The Tees Valley Combined Authority (TVCA) Net Zero Strategy incorporates priorities for homes & communities, public organisations, and nature & resources, alongside decarbonisation of industry and transport. The TV Strategy is designed to complement the strategies of the partner Authorities and our goals are broadly aligned. The TVCA strategy highlights opportunities for economic growth

associated with clean energy and ‘green’ technologies, however it also acknowledges the importance of maximising the impact of national funding and Government Policies.

Cabinet are asked to consider making representations to the Government for more resources toward the major investment required to deliver our environmental sustainability objectives.

REASONS FOR RECOMMENDATION(S)/DECISION(S)

This report is to update Cabinet upon the actions following the adoption of the Environmental Sustainability and Carbon Reduction Strategy 2022-32.

Cabinet is also invited to study the data which indicates the reduction of greenhouse gasses over a sustained period and the highlighted position of carbon emissions for the authority relative to targets.

RECOMMENDATIONS

1. Cabinet notes the positive progress on our Environmental Sustainability targets, as set out in this report and the appendices.
2. Cabinet seeks to influence Government to provide substantial additional resources to enable further decarbonisation, environmental protection and community resilience.
3. Cabinet supports the identification of additional resources, within future Medium Term Financial Plans, to support the next phase of carbon reduction and environmental sustainability measures.

DETAIL

1. In 2022 the Council implemented the Environmental Sustainability and Carbon Reduction Strategy 2022-32. The aim of the strategy is for the Council to become Net Zero by 2032, and Borough wide by 2050.
2. The strategy seeks to make a difference in three ways.
 - a. By focusing on Council operations and infrastructure
 - b. Through the delivery of strategies, policies, and work programmes, and
 - c. By influencing others.
3. The strategy has set four overarching aims for environmental sustainability and carbon reduction.

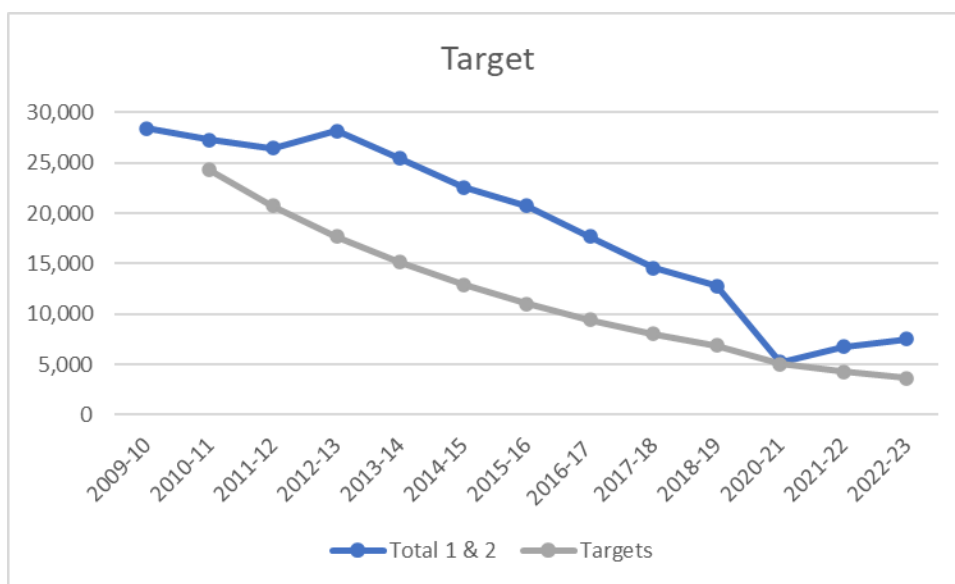
<p>Aim 1: Achieve net zero greenhouse gas emissions</p> <ul style="list-style-type: none"> A) Reduce energy demand wherever possible B) Accelerate the shift towards use of sustainable energy C) Take other action to reduce harmful emissions D) Capture and store carbon in woodlands and other natural habitats 	<p>Aim 2: Protect and enhance the natural environment</p> <ul style="list-style-type: none"> A) Protect, extend and connect areas of natural habitat and help address the decline in native species. B) Help to improve air quality by reducing harmful emissions. C) Take action to improve water quality and reduce local demand for water
<p>Aim 3: Use all resources efficiently and minimise waste</p> <ul style="list-style-type: none"> A) Ensure sustainable purchasing and procurement of goods and services. 	<p>Aim 4: Adapt to the impacts of climate change.</p> <ul style="list-style-type: none"> A) Ensure essential services and operations are resilient to the likely future impacts of climate change.

<p>B) Maximise the use of existing resources, minimise waste and achieve high levels of re-use and recycling.</p> <p>C) Minimise litter and waste crime and encourage responsible disposal of waste.</p>	<p>B) Increase the preparedness and resilience of local communities and businesses.</p> <p>C) Plan and adapt the built and natural environment to withstand the impacts of climate change.</p>
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4. The examples of progress and good practice, highlighted in paragraph 16, are grouped within these aims.
5. To understand the mechanisms required to transition to a sustainable future and provide an early indication of the scale of the challenge we face, we benefited from an assessment by the independent Tyndall Institute.
6. According to the Tyndall Institute, at 2017 CO₂ emission levels, Stockton-on-Tees will exceed the recommended carbon budget available within 6 years from 2020. To stay within the recommended carbon budget Stockton-on-Tees will, from 2020 onwards, need to achieve average mitigation rates of CO₂ from energy of around -14.6% per year.”

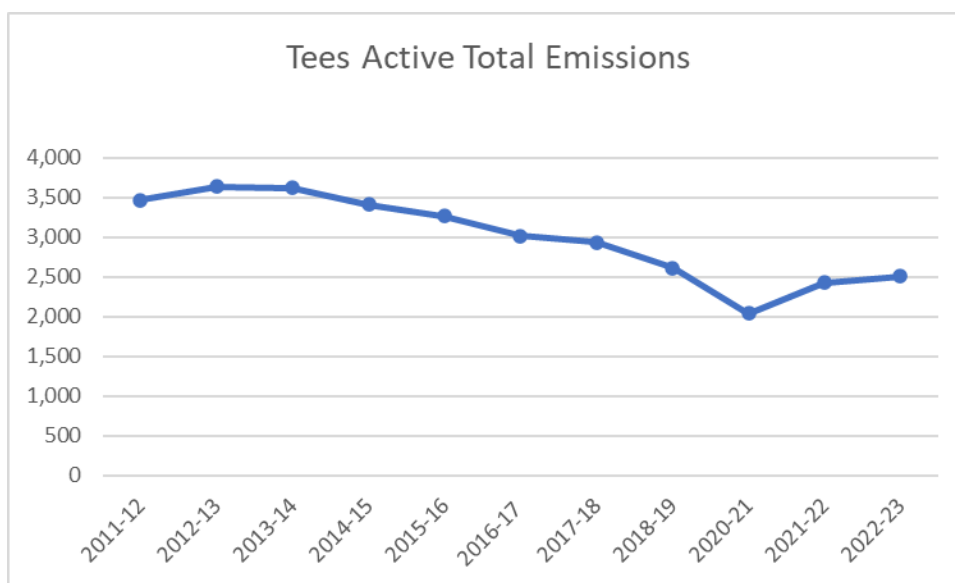
Total emissions and change over time.

7. Since 2010 Stockton Borough Council has made significant efforts to reduce emissions and there has been an overall reduction of 61%.



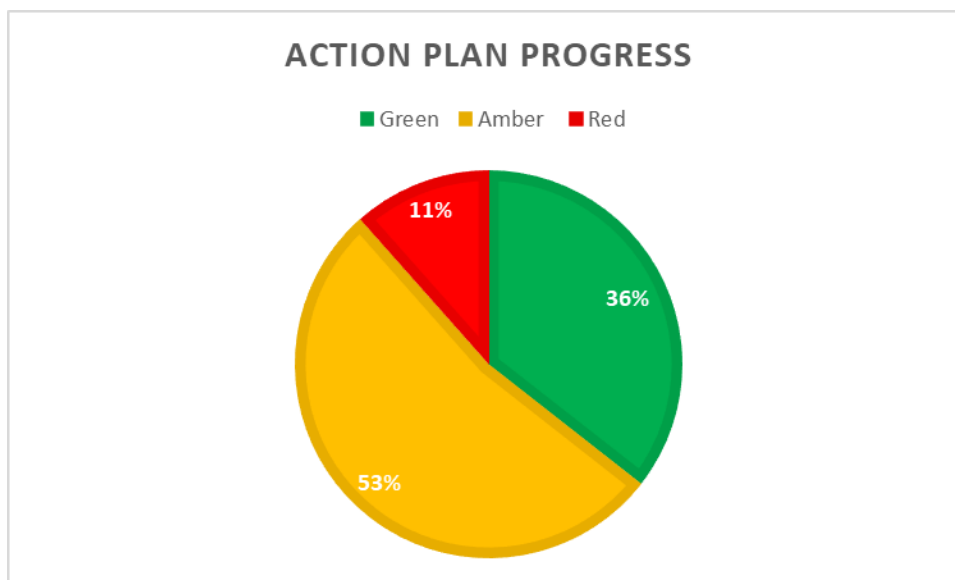
8. The most significant reduction was demonstrated during the period of Covid-19 where cultural working changes were implemented such as working from home during lockdown and a reduction in the energy use of council assets. From 2021-22 there has been an increase in emissions, in part due to a return to pre-covid working conditions and service provision. Calculations are also affected by changes to the energy framework, from which schools were removed in 2019.
9. The table above demonstrates that it was only in 2020/21 that the necessary trend was achieved. However, this was an unprecedented year due to the Covid-19 pandemic.
10. There has been a steady increase since 2020/2. The data identifies that in the 2022/23 financial year, Stockton on Tees Council produced 3,837 Tonnes of CO₂e above the target levels.

11. It is projected that current levels of carbon emissions associated with our assets will continue to rise, however the move to Dunedin House and subsequent decommissioning of other buildings becomes will enable a future reduction. There also remains a heavy reliance on fossil fuels within fleet services, partly due to limited charging infrastructure and inadequate financial support for the electrification of fleet vehicles.
12. Our leisure centres have demonstrated a sustained reduction of carbon emissions since 2012, new measures recently installed such as photovoltaic panels on the roof of IB Leisure should show a reduction in year 23/24.



Action plan monitoring

13. The ES&CRS is a Council-wide approach that covers all service areas. The action plan sets out what all service areas are doing to address carbon emissions. There has been genuine effort and real innovation across many services.
14. The actions within the plan are categorised as
 - Red – Not Started
 - Amber – Progressing / Pending
 - Green – Established
15. Some of the actions that are categorised as Red are because of aspirations that will be considered as part of the ongoing work on Powering our Future and related reviews or Member scrutiny. In many cases the carbon reduction will be made possible by a remodelling of the service toward different outcomes. The action plan highlights the need for carbon emissions can be considered as part of any service review.



16. Examples of good practice are demonstrated below:

Aim 1: Achieve net zero greenhouse gas emissions

- **'Rubber roads'** – A ground-breaking road resurfacing project continues to achieve significant carbon savings. Working alongside our framework providers Tarmac roads are being surfaced with recycled materials which reduces emissions by up to 80%. The contractor is also using a biofuel in their machinery, it is believed that the schemes have the lowest CO2 emissions for road surfacing in the UK.
- **Solar Panel installation** - During the 2022/23 financial year, SBC has generated 171,379KwH of energy. Solar generation is increasing.
- **EV car lease scheme** – The council have provided a car lease scheme for electric vehicles, the scheme has been very popular, currently 74 cars have been delivered with another 5 on order.
- **Carbon Literacy training** – currently 30 council staff have completed APSE Carbon Literacy. SBC own programme has been developed and has trained 30 Councillors.
- **Climate coalitions** - 2022 saw the creation of four climate coalitions: Youth, Community, Business and Creative. The first year has seen the coalitions become established and over 50 active members who share environmental practices, offer support and advice in their commitment to reducing emissions across the Borough.

Aim 2: Protect and enhance the natural environment.

- **Tree planting** – The authority planted over 20,000 trees in the past two planting seasons increasing canopy cover, improving biodiversity and providing additional attractive amenity space.
- **Management of Greenspaces** - appropriate management can increase biodiversity of greenspaces. Positive pilot scheme of No Mow Summer on sites in Billingham were positively received by residents. Results have been very promising with a richer spread of grasses and wildflowers and encouraging signs that pollinators are returning to utilise the area.
- **Fleet.** Our fleet adds to the significant carbon emissions contributing to 30.5% of the total calculated carbon emissions for the reporting year. Most of our diesel fleet vehicles are now Euro 6 status, which ensures that particulate matter is kept to a minimum and harmful gasses are not released. Electrification is being trialled as well as ongoing investigations of alternative fuel sources.

Aim 3: Use resources efficiently and minimise waste

- **Tees Active** – all sites have achieved Green Mark accreditation, progress in environment and sustainability actions are required to maintain the accreditation on an annual basis. Measures such as the use of overnight pool covers, voltage optimisation and reduced temperature heating systems have all been instigated.
- **SBC** - the authority is committed to reducing our administrative buildings. Buildings in Billingham have now closed and in early Jan 24 we will see a migration to Dunedin House. By reducing our asset base we will significantly reduce our energy consumption and corresponding carbon emissions
- **SIRF** –in 2023 there was a strong commitment to reducing the environmental impact of the festival, this was demonstrated by using biofuel in generators and promotion of sustainable travel options for performers and visitors. Recycling collection was available during the festival with 420kg of recyclable waste collected over the 4-day festival.

Aim 4: Adapts to the impact of climate change

- **Tees Tidelands** - Stockton Borough Council on behalf of the Tees Valley Authorities and the Environment Agency, is working on a project to improve flood resilience and create intertidal habitat, unlocking biodiversity net gain in the Tees Estuary.
- **Billingham Beck** - part of the Environment Agency's wider Tees Tidelands programme which seeks to 'reconnect' the Tees estuary with its upstream river catchments. It also aims to restore water-dependant habitats across the beck's floodplain, within the boundary of Billingham Beck Valley Country Park
- **Emergency planning procedures** – Emergency procedures are formally reviewed on a three-yearly basis, or as incidents, exercises or notified changes demand including Flooding at Lustrum Beck in 2021 and the Tidal Surge at Port Clarence in 2013.
- **Flood risk assessments** – Local standards have been incorporated into SuDs Guidance (Sustainable Drainage Systems) including discharge into existing watercourses and allowances for sea level rises over the lifetime of a development.

Waste and recycling

17. Waste has a significant impact on carbon emissions, with landfill producing 40% of greenhouse gas emissions nationally, this can be reduced by increased recycling and reduction of waste in the first place.

18. Nationally, weekly food waste collections will become mandatory by 2026 due to the Resources & Waste Strategy & Environment Act 2021 and as part of the Government's 'Simpler Recycling' reforms, the Deposit Return Scheme (DRS) and Extended Producer Responsibility (EPR) are expected to be introduced by October 2025.

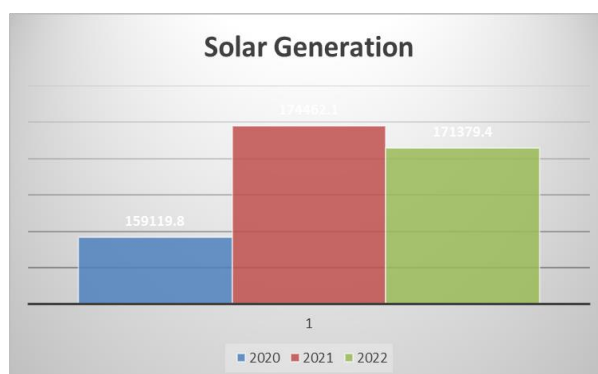
19. The Council's Place Select Committee is currently reviewing waste and recycling. As part of that review the national Waste and Resources Action Programme (WRAP) specialists have provided data on performance compared to similar local authorities.

20. The Place Select Committee's report will include options that would enable a significant carbon reduction on our overall waste a recycling approach. However, investment is likely to be required in vehicles and infrastructure to achieve the carbon saving.

Solar generation

21. Renewable energy is currently the cheapest form of energy generation and payback rates of new installations are decreasing rapidly.

22. Recent large-scale installations include Cowpen Depot and IB Leisure, whilst the council has partnered with an award-winning social impact business to offer many of our maintained and academy schools access to reduced price solar energy.



- Solar generation is increasing; however, the 2022 figures are slightly lower due to faults being recorded on the meters in some months during the reporting year.
- Solar panels at Cowpen Depot have saved 22,017kg of Carbon emissions, the equivalent of planting 1,332 mature trees.
- Solar panels installed at Ingleby Barwick Leisure has saved 1,734kg of Co2 since their installation in September of 2023, the equivalent of planting 105 mature trees.

23. There is potential for further solar regeneration as a cost effective means of reducing our carbon emissions, however capital investment would be required to achieve this carbon saving.

Grants and national resources

24. There are an increasing number of time limited Government grant regimes linked to carbon reduction and climate change. In particular, there are numerous schemes to support tree planting. However, for the major changes such as fleet decarbonisation, improvements to building efficiency, climate change adaptation and modal shifts in transport, the resources are limited to pilot projects and modest one-off grants with short lead-in times.

25. In 2023 Stockton Council responded to the national **Public Sector Decarbonisation Scheme**. We applied for funding to develop decarbonisation plans for a number of our school, leisure and corporate building assets. We submitted an application within 15 minutes of the portal opening. The application value was £510,000. We were not successful and the only feedback we received was that the fund was oversubscribed.

26. The planned and sustained transformation that is now urgent, needs substantial new and multi-year funding. Without that the Council is unlikely to be able to achieve its Net Zero ambitions.

Data collection

27. Services currently report verbally on ES&CRS outputs, with that information being manually entered into monitoring reports. Improvement in data collection is required to ensure consistency in data, to enable better analysis, comparison with other Authorities, and to identify the areas where further work is required.

28. We expect that Environment Act legislation will require Local Authorities to deliver and evidence progress against a number of targets. Although these targets and duties have not yet been set, we should plan for the formalisation and integration of AS&CRS monitoring into wider Council performance monitoring and data analysis processes.

Engagement and partnerships - Climate Coalitions

29. As part of the Council's efforts to influence residents in reducing their carbon emissions and raising awareness of their environmental impact, four Climate Coalitions have been

established across different sectors of the Borough.

- The Business Climate Coalition currently has members from 36 businesses that are based in or have operations in Stockton-on-Tees, from a variety of industries, from sole traders to multinational companies.
- The Creative Coalition for Climate Change is managed by the ARC and brings together almost 30 of those working in the creative sector to improve communication around climate change, offer sustainable productions and inspire creation of new work.
- The Youth Climate Coalition has 12 member schools, is managed by BMBF and recently held a Youth COP28 event at the ARC, which was attended by over 60 students and featured hands-on workshops and talks on a range of environmental issues.
- The Community Coalition is managed by Catalyst, and brings together VCSE's, community groups and charities working on projects related to climate action, with over 60 organisations signed up.

30. There are currently over 50 active members across all coalitions, with many more signed up and working in the background, and the meetings provide a productive space for networking, knowledge sharing and collaborative action.

The Coalition Chairs are currently finalising a cross-coalition Action Plan for the Borough to support the ESCR Strategy and work closely with the Environment team to achieve this.

31. **Festival of Thrift** - In 2023 the Council hosted the first of a three-year agreement at John Whitehead Park, Billingham. The festival is a celebration of sustainable living and attracts around 50,000 visitors to the region. The festival is a nationally recognised event championing sustainable living.

32. The festival has a very clear vision to create positive, sustainable change in people and places and the programme aims to do just that by celebrating ways to live more sustainably and look after the planet we call home. Thrift works to develop new relationships with local communities, businesses and partners, whilst delivering a high-quality festival which inspires, brings joy and helps us to imagine a better future together.

33. Thrift works hard to not only measure their carbon emissions but shares tools with suppliers, crew, audience and artists enabling others to gain an understanding of their own impact. All of this work is communicated to our residents and communities in order to influence individual actions.

COMMUNITY IMPACT IMPLICATIONS

34. Climate change affects everyone, but there is a growing body of evidence that the poorest in society will experience the worst impacts. The Environmental Sustainability & Carbon Reduction Strategy aims to address the threats to all the communities of Stockton on Tees through actions that target their circumstances. The ES&CRS follows the principles of the Council's Equality Strategy and will seek to reduce the inequality faced by disadvantaged communities where those inequalities are likely to be widened by climate change.

CORPORATE PARENTING IMPLICATIONS

35. None

FINANCIAL IMPLICATIONS

36. Saving energy can have a positive impact upon reducing emissions and finances, using less will cost less! By improving energy efficiency, the same tasks can be accomplished with less input, resulting in lower emissions and lower energy bills.

37. Whilst it is anticipated that there will be future investment required to deliver the long-term commitment to achieve net zero, no additional financial commitments beyond the approved MTFP are required at this stage to support the strategy and specific points outlined in this report.

38. Officers, continue to seek out external funding opportunities that could be applied for to support the decarbonisation agenda. A recent example of this being a bid, (outcome currently pending), to Sport England to support Swimming Pools with a focus on improving energy efficiency and reducing carbon. Such opportunities will continue to be explored moving forward to maximise external funding.

LEGAL IMPLICATIONS

39. None

RISK ASSESSMENT

40. There are several risks relating to the content of this report. The Council has established the ES&CRS to improve the local environment and to achieve net zero by 2032. Although this report demonstrates progress is being made, there are risks that carbon reduction is becoming significantly harder without financial investment and net zero may not be achieved. This could lead to reputational risk to the Council, potential legal risks and more significantly, the environmental and economic risks associated with the impacts of a warming climate on the borough.

41. The risks are currently managed through the implementation of a detailed action plan, an ES&CRS Steering Group to oversee implementation, careful monitoring of carbon emissions and regular reports to Cabinet.

WARDS AFFECTED AND CONSULTATION WITH WARD/COUNCILLORS

42. As the strategy is a wide-ranging document all wards will be affected.

BACKGROUND PAPERS

43. Appendix A- List of actions with traffic lights

44. Appendix B- Description of scope 1, 2 and 3.

Name of Contact Officer: Neil Mitchell

Post Title: Head of Environment, Leisure, and Green Infrastructure

Email Address: neil.mitchell@stockton.gov.uk

Appendix A

Action Plan.

Action	Status
Objective 1.1 Improve Air Quality	
Clean Air Day	established
Educational project on fuel burning and smoke free zones	progressing
Educational project to reduce 'idling' at taxi ranks and schools	progressing
DEFRA taxi clean air zone	established
Implementation of Air Quality Strategy	progressing
Monitoring of Air Quality across the Borough.	established
Air quality educational project with secondary schools.	progressing
Objective 1.2 Reduce energy demand where possible.	
Solar for schools	progressing
E-bike scheme for employees / enforcement	established
Warm Homes Healthy People	established
Solar panels on Cowpen Depot	established
Training on maintenance and installation of energy efficiency project with SBC staff	progressing
Objective 1.3 Take action to reduce harmful emissions	
Installation of EV charging points - Phase 1	established
Identification of EV Charging points sites - Phase 2	progressing
cycling and walking infrastructure	progressing
Tees Valley Capability Fund	progressing
Bus Corridor improvements	progressing
Electric fleet vehicles.	progressing
Reduce fleet numbers	progressing
Fleet replacement vehicles to latest Euro Emission standard if EV is not an option.	progressing
Alternative fuel vehicles (HVO)	progressing
Asphalt IQ Carbon Monitoring Trial phase 1.	progressing
Asphalt IQ Carbon Monitoring Trial phase 2	not started
Asphalt IQ Carbon Monitoring Trial Phase 3	not started
Objective 1.4 Capture and Store Carbon in woodlands and other natural habitats.	
Action	Status
Objective 2.1 Ensure sustainable purchasing and procurement of goods and services	
Implement Social Value Policy	established
Environmental priorities incorporated in contract tenders	established
Support to tenders to increase their environmental priorities	progressing

Minimise carbon and environmental footprint of council led events.	progressing
Identify and report on Scope 1 and Scope 2 emissions.	progressing
Identify Scope 3 emissions	Not started
Enforce Single Use Materials Policy across the Borough	progressing

Objective 2.2 Maximise the use of existing resources, minimise waste and achieve high level of re-use and recycling

Improve internal recycling facilities	progressing
Baseline carbon assets	not started
Electricity reduction	progressing
Reduce the carbon footprint through the migration of workloads to the cloud, device refresh and power management configuration	established
Highway lighting	progressing
Solar panels and battery storage on council assets	progressing
Voltage Optimizers within Tees Active	established
Combined Heat and Power Units	established
Pool pump inverters	established
PIR Lighting	established
Energy from NEPO	established
Electricity generating Archimedes screws	established
Reduce water consumption	progressing

Objective 2.3 Minimise litter and waste crime and encourage responsible disposal of waste

Weekly food waste collections.	Pending
Increase levels of household recycling	Pending
Reduce household waste collection to fortnightly.	Pending
Deliver initiatives through education and engagement to minimise consumption	progressing
Implement measures to reduce fly-tipping and waste crime	progressing
E waste	progressing

Action	Status
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Objective 3.1 Protect, extend and connect areas of natural habitat and help address the decline in native species

Biodiversity net gain	established
Ecology resources available to planning team.	not started
Research on urban planting	progressing
SBC tree and plant nursery	Pending
Trees for Tees	
Tree Planting	established
Forestry / Woodland mapping	progressing
Forestry / Woodland management	progressing
Increase awareness and understanding of the natural environment and encourage community participation.	progressing
Reduce risk of pollution	established
Bee blocks incorporated into new buildings	not started
Bird nesting boxes incorporated into new buildings	not started
Local Nature Recovery Strategy.	Pending
Biodiversity credits / Carbon Credits and Nutrient Neutrality	

Biodiversity assessments	progressing
Woodland Creation Accelerator Fund	established
Thematic plans for development and management key habitats within identified open spaces	progressing
Lustrum Beck Urban River Restoration Project	progressing
Increase opportunities for public participation in the development and management of parks and greenspace	progressing
Norton 'Pocket of Nature Partnership'	progressing
Environmental Education	established
local wildlife sites	established
Research on carbon sequestration through natural habitats	not started
Environmental / Conservation Work Team	established
No Mow Summer	
Tees Tidelands	
Billingham Beck Habitat restoration project	progressing

Objective 3.2 Help to improve air quality by reducing harmful emissions

Review planning applications, including demolition and construction	established
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Objective 3.3 Take action to improve water quality and reduce local demand for water

Reduce water consumption	progressing
Rainwater harvesting	progressing
Rainwater harvesting	not started
Rainwater harvesting	progressing
Film on winter garden to reduce evaporation	not started
Targeted watering in the garden	progressing

Actions	Status
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Objective 4.1 Ensure essential service and operations are resilient to the likely future impacts of climate change

Single Depot for Community Services	Pending
Emergency planning procedures	established
regular monitoring and evaluation of action plan.	not started
Care sector and public health	not started
Tree management	progressing
Flood risk assessment	established

Objective 4.2 Increase the preparedness and resilience of local communities and businesses

Ensure residents and businesses are flood prepared.	established
Climate coalition - business	established
Climate coalition -communities	established
Climate coalition - youth	established
Climate coalition - creative	established
Public awareness campaigns	progressing
Healthy Streets	progressing
Retrofit	progressing

Objective 4.3 Plan and adapt the built and natural environment to withstand the impacts of climate change

SUDs
BREEM standards adopted as building standards.
Floodwater storage
Building Design

established
Pending
progressing
not started

Appendix B

Operational Scopes

We have collected and measured all scope 1 & 2 emissions. Scope 1 covers emissions from sources that the council controls directly. Scope 2 emissions cover the indirect emissions associated with the purchase of electricity.

At present we are unable to accurately calculate scope 3 emissions. Scope 3 encompasses emissions that are not produced by the council itself but by those that the council interacts with up and down the value chain, for instance when we buy, use, and dispose of products from suppliers.

For the purposes of the current reporting year the following activities have been included:

Scope 1

Gas consumption

Owned fleet transport

Scope 2

Purchased electricity.

Scope 1 emissions

These are “direct” emissions – those that a company causes by operating the things that it owns or controls. These can be a result of running machinery to make products, driving vehicles, or just heating buildings and powering computers.

Scope 2 emissions

These are “indirect” emissions created by the production of the energy that an organization buys. Installing solar panels or sourcing renewable energy rather than using electricity generated using fossil fuels would cut a company’s Scope 2 emissions.

Scope 3 emissions

These are also indirect emissions – meaning those not produced by the company itself – but they differ from Scope 2 as they cover those produced by customers using the company’s products or those produced by suppliers making products that the company uses.