

**AGENDA ITEM**

**REPORT TO CABINET**

**March 13<sup>th</sup> 2025**

**REPORT OF CORPORATE  
MANAGEMENT TEAM**

**CABINET DECISION**

**Lead Cabinet Member – Councillor Clare Besford**

**Environmental Sustainability & Carbon Reduction Strategy (ES&CRS) 2022-32 Annual  
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, significant wildfires and species collapse. If we wish to limit climate change by reducing carbon emissions, we need to take action, building on the work already achieved.

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, it is likely that we will need to evidence further progress on CO<sub>2</sub>, waste, water and air quality, in the coming years.

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.

Stockton Council's Environmental Sustainability and Carbon Reduction Strategy (ES&CRS), adopted in 2022 sets out the direction we need take and describes the actions that would contribute to the achievement of net zero. The Council has made significant progress within the resources available, achieving a steady decline in carbon emissions over a long period. However, substantial additional investment will be required in the coming years if we are to remain on target for Net Zero by 2032.

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

**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**

That Cabinet note the annual monitoring report.

**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><b>Aim 1: Achieve net zero greenhouse gas emissions</b></p> <ul style="list-style-type: none"> <li>A) Reduce energy demand wherever possible</li> <li>B) Accelerate the shift towards use of sustainable energy</li> <li>C) Take other action to reduce harmful emissions</li> <li>D) Capture and store carbon in woodlands and other natural habitats</li> </ul>	<p><b>Aim 2: Protect and enhance the natural environment</b></p> <ul style="list-style-type: none"> <li>A) Protect, extend and connect areas of natural habitat and help address the decline in native species.</li> <li>B) Help to improve air quality by reducing harmful emissions.</li> <li>C) Take action to improve water quality and reduce local demand for water</li> </ul>
<p><b>Aim 3: Use all resources efficiently and minimise waste</b></p> <ul style="list-style-type: none"> <li>A) Ensure sustainable purchasing and procurement of goods and services.</li> <li>B) Maximise the use of existing resources, minimise waste and achieve high levels of re-use and recycling.</li> <li>C) Minimise litter and waste crime and encourage responsible disposal of waste.</li> </ul>	<p><b>Aim 4: Adapt to the impacts of climate change.</b></p> <ul style="list-style-type: none"> <li>A) Ensure essential services and operations are resilient to the likely future impacts of climate change.</li> <li>B) Increase the preparedness and resilience of local communities and businesses.</li> <li>C) Plan and adapt the built and natural environment to withstand the impacts of climate change.</li> </ul>

Fig 1: strategy objectives.

4. The examples of progress and good practice, highlighted in paragraph 19, 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 have calculated the council's emissions using the industry standard Carbon Emissions Calculate provided by the Local Government Association.

**Total emissions and change over time.**

- Since carbon emissions data has been calculated in 2010, Stockton Borough Council has made significant efforts to reduce emissions and there has been an overall reduction of 75.18%, from 28,415T CO<sub>2</sub>e to 7,052T CO<sub>2</sub>e.

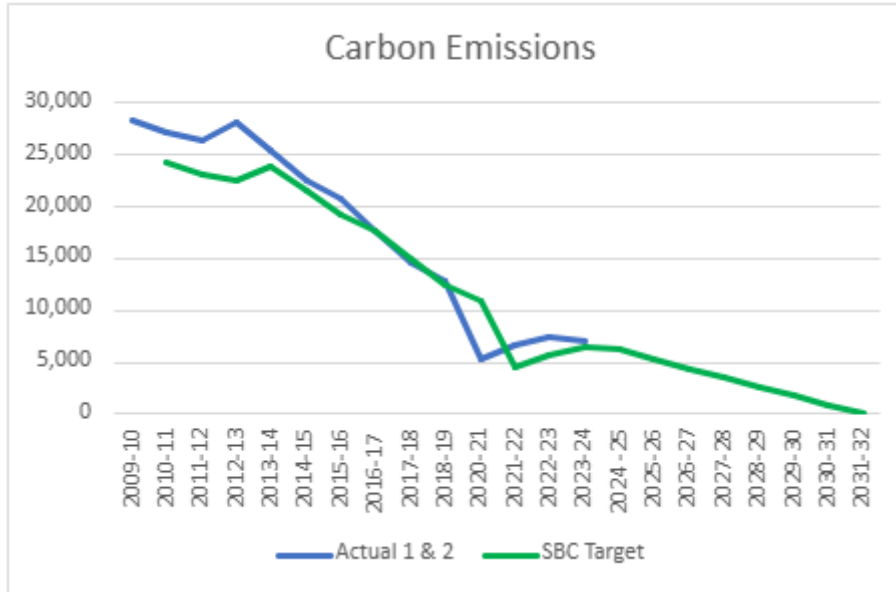


Fig 2: Carbon emissions since 2009/10

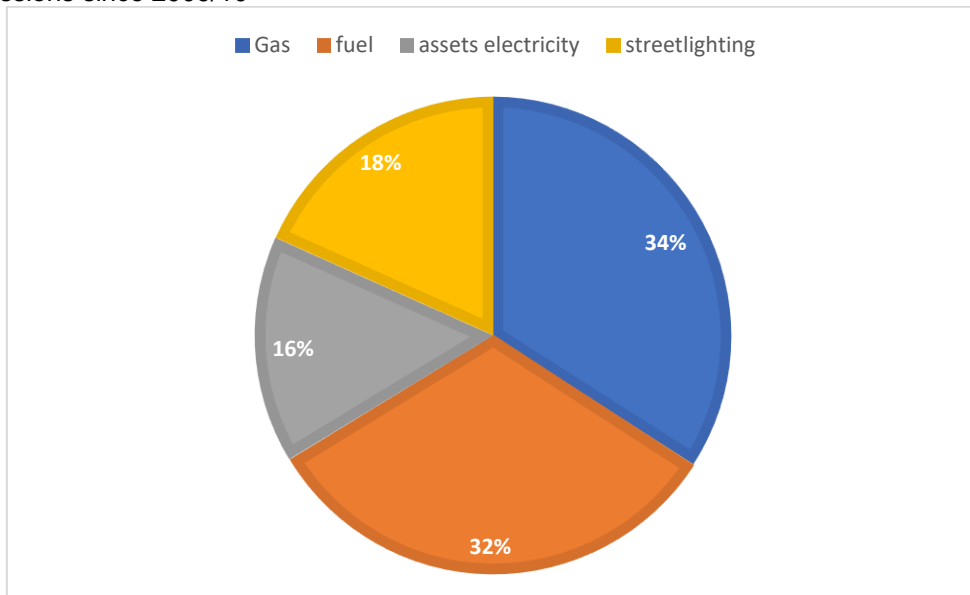


Fig 3: Breakdown of carbon sources

- 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.
- To calculate the carbon emissions for Stockton Borough Council the following data is used.



Scope 1	Heating Gas Fleet Fuel use
Scope 2	Purchased Electricity – Building Use Purchased Electricity - Streetlighting
Scope 3	Supply chain

Fig 4: Scopes

9. In collaboration with the Procurement Team a new data tool allows us to review Scope 3 emissions for the first time. Oxygen Finance Insights provides real-time data on all procurement and calculate the carbon emissions associated with spending. It also provides an opportunity to compare carbon emissions with other Local Authorities. Although we currently do not have a legal obligation to report scope 3 emissions, we believe this will be a temporary omission and we expect legislation to change. Regardless of reporting requirements, any omission of scope 3 gives an incomplete picture.
10. In the last financial year, Oxygen Finance Insights indicates that Scope 3 emissions accounted for 47.3 Kt of carbon emissions. The top 3 carbon emitters were Elderly Residential Care, Property Construction and Waste Collection & recycling.

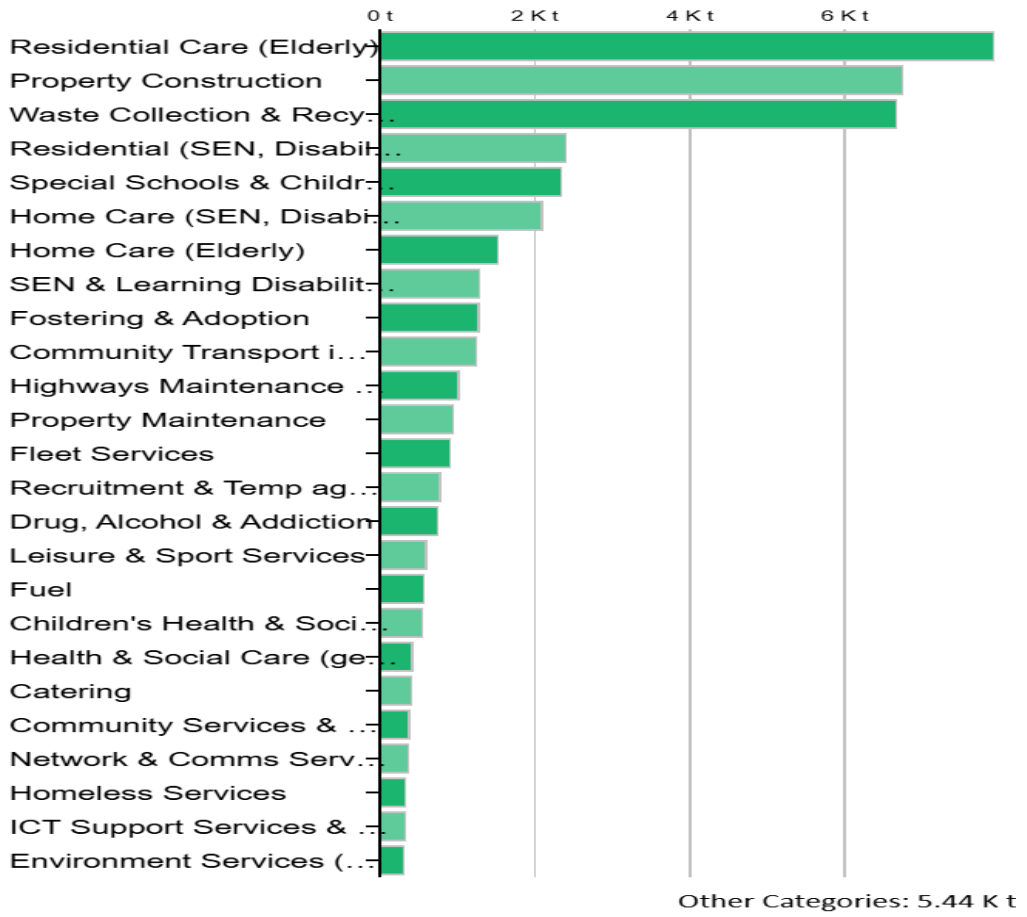


Fig 5: Scope 3 carbon emissions by service

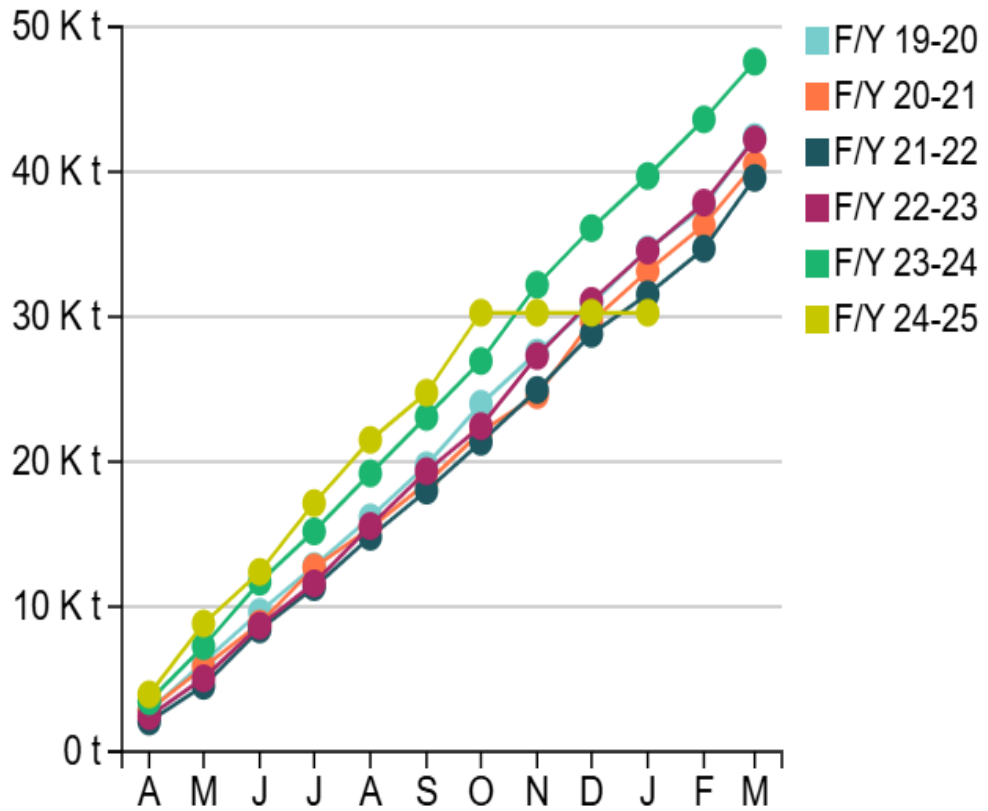


Fig 6: Scope 3 carbon emissions trajectory

11. The above data show that Scope 3 emissions for 2023-24 were the highest in the last 5 years, however currently the data for 24-25 shows the trajectory to be lower this financial year. The Scope 3 carbon emissions data is a direct result of Local Authority spending, in simple terms, this means, if Stockton Borough Council spends less then Scope 3 carbon emissions will be reduced. The apparent flat line of data in 2024/25 is unexplained, officers are investigating.
12. The tables above demonstrates that it was only in 2020/21 that the necessary rate of carbon reduction was achieved. However, this was an unprecedented year due to the Covid-19 pandemic. To reach Net Zero by 2032 from the current position, there needs to be a reduction of 881.5t per year. To visualise what 881.5T CO<sub>2</sub>e looks like, it equates to the carbon produced by 572 average houses in one year.
13. The move to Dunedin House and subsequent decommissioning of other buildings will enable a future reduction and have a significant impact upon decarbonisation. However, without significant acknowledgement and need to reduce further, the targets from now until 2032 will only get higher each year. Any shortfall from 881.5 Tonnes will have to added to the next year. In the same way that any increase over 881.5Tonnes would have a positive impact on reduction targets for future years.

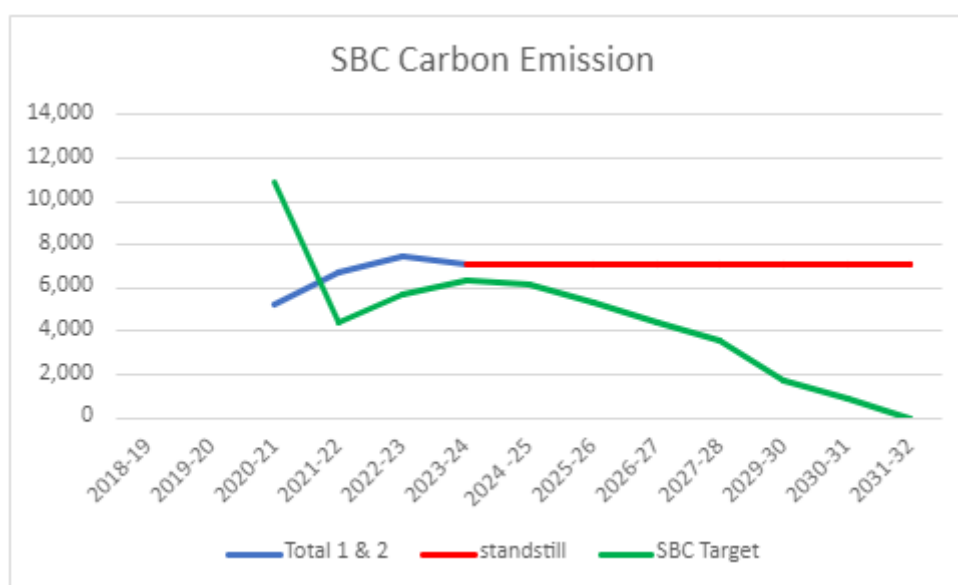


Fig 7: SBC carbon emission trajectory

14. The graph above indicates that without investment or reduction in carbon the authority will not achieve Net Zero by 2032. The red line in the table above shows the projected trajectory if Stockton-on-Tees Borough Council continues to operate without significant intervention, the net zero target is likely to be missed by 7,052T CO<sub>2</sub>e at a minimum.

### Leisure Centres

15. 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 assist with energy efficiency and reduction on the reliance of purchased electricity.
16. There has been a 42.2% increase in visits to Ingleby Barwick Leisure in 2023/24 compared to the previous year. This is a wonderful, good news story however it does have an impact on emissions. During this year we have noticed a 9.02% increase on CO<sub>2</sub>e emissions.
17. Tees Active have demonstrated commitment to reducing emissions and were awarded Silver in the Green Mark Accreditation scheme. Whilst the graph below shows a slight increase in

emissions, at the same time total visits across the whole of Tees Active sites has increased by 24.3%.

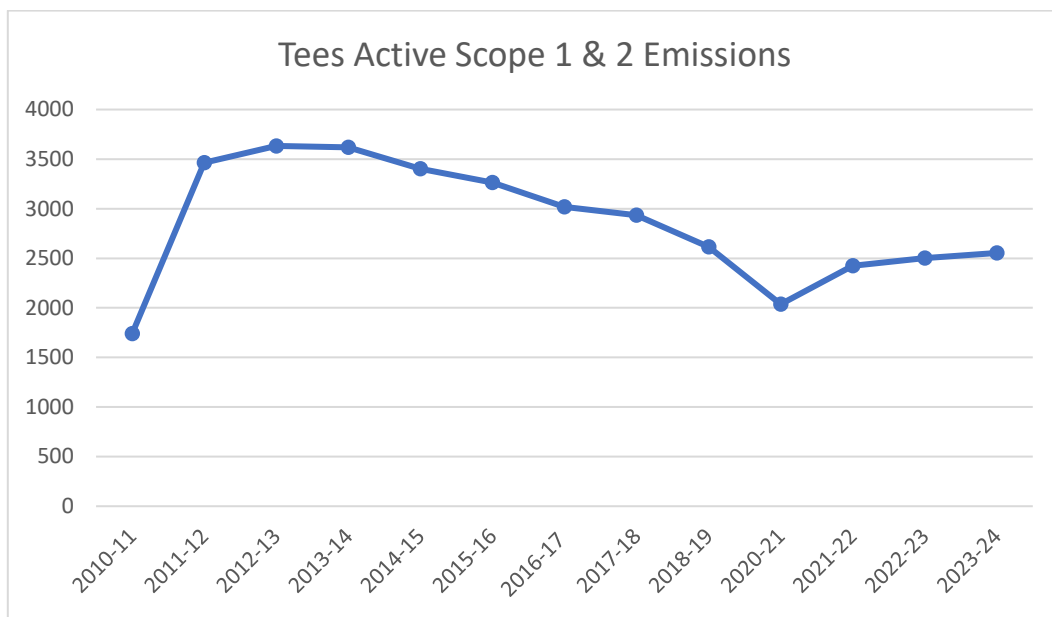


Fig 8: Tees Active carbon emissions.

### Action plan monitoring

18. 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. For instance, the introduction of an Electrified Library Vehicle and a new build at Billingham South Primary that is operationally fully zero carbon by design, through the installation of heat pumps and high insulation standards.



Fig 9: Image of the Electrified Mobile Library Vehicle in operation

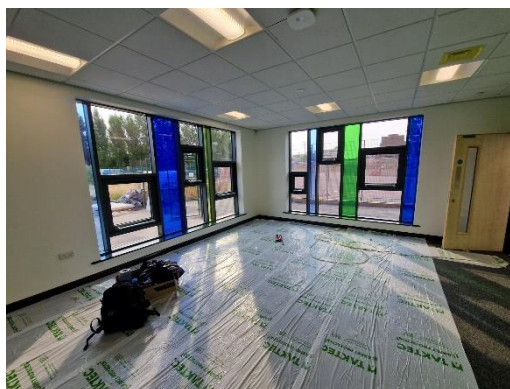


Fig 10: Inside view of Billingham South Zero Carbon Primary School building

19. The actions within the plan are categorised as

- Red – Not Started
- Amber – Progressing
- Green – Established

20. 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 to be considered as part of any service review.

21. The service area actions were formed within the budget parameters at the time of the development of the ESCR Plan. The majority of those are on track. However, to remain on target for Net Zero in 2032, additional actions will need to be developed.

22. On the 19<sup>th</sup> February 2025, council agreed the Medium Term Financial Plan update and strategy. Council agreed to revise the existing £6m prudential borrowing approval for investment in Children’s Services residential homes and Spark of Genius and replace with a Council wide investment fund of £20m from prudential borrowing for self-funding capital investments linked to transformation of Services. This could include investments relating to climate change. Officers are now working to prioritise schemes to bring relevant business cases forward to Cabinet for consideration.

23.

Objective	Established	Progressing	Not Started
Achieve Net Zero	22	16	2
Resource efficiency minimise waste	18	16	
Protect and enhance the natural environment	17	10	1
Adapt to climate change	16	14	

Fig 11: Action plan count



24. Illustrations of good practice are indicated below:

<p><b>Aim 1: Solar panels installed at Dunedin.</b></p> 	<p><b>Aim 2: No Mow Summer</b></p> 
<p><b>Aim 3: Recycling facilities at SIRF</b></p> 	<p><b>Aim 4: Flood alleviation works at Six Fields, Hartburn</b></p> 

**Fleet**

25. There remains a heavy reliance on fossil fuels (diesel) within fleet services, contributing 32% of the total emissions for 2023/24. This is partly due to limited charging infrastructure and insufficient, identified resources for the electrification/conversion/purchase of alternative fuel fleet vehicles.

26. Currently 3% of our fleet is electrified, this is stark contrast to our Local Authority neighbours who have decarbonised their fleet by 15-20% on average. Redcar and Cleveland for example have electrified 26% of their fleet, additionally 6 of their vehicles are running on biofuel.
27. A Fleet Transformation Review is currently in progress, the approach is holistic, considering the carbon emissions, financing and service provision.

### **Waste and recycling**

28. Already agreed changes to waste collection and recycling regime, informed by a cross party scrutiny review, are expected to achieve significant improvements in recycling rates.
29. The following will be implemented in 2026.
  - The Council will collect food waste and recycling every week and collect the other residual waste (non-recyclable waste that normally goes in residents' green wheeled bin) on a fortnightly basis.
  - Each household will receive an additional weighted bag for the collection of dry recycling and a new 5 litre indoor and 23 litre outdoor caddy (including caddy bags) for food waste, giving every household the opportunity to increase the amount of waste that can be collected and recycled on a weekly basis.
  - Work completed by WRAP on behalf of Stockton Council anticipated that a move to the fortnightly refuse collections with the introduction of a mandatory weekly food waste collection would see an increase in kerbside recycling on 12% taking our total recycling rate to around 36%, above the average for the Tees Valley and across the North East.

### **Solar generation**

28. Renewable energy is currently the cheapest form of energy generation and the rate at which a project pays back the initial investment is increasing rapidly. For example, the solar PV installation on the roof of Dunedin House has a payback period of roughly four years.
29. In the last financial year 2023/2024 SBC has generated 215,704kWh of energy use through solar panels, and generated £29,753.65, through selling excess energy generation back to the grid. 215,704Kwh of energy divided by 3000 SBC staff members equates to 6.9 hours of computer use per person per week generated by renewable energy.
30. It would take 1,154,400 kWh of energy to power 3,000 computers for 37 hours per week over a year. Stockton Borough Council would need approximately 4,016 solar panels to generate 1,154,400 kWh of energy annually, assuming an average of 3.5 peak sun hours per day and 75% system efficiency. This would require approximately 6,827.2 square meters (or 72,288 square feet) of space to install 4,016 solar panels, Roughly the size of one football pitch.
31. 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. Officers will develop costed proposals for solar generation for consideration.

### **Resource needs and grants**

32. There are several time limited Government grants linked to carbon reduction, biodiversity uplift and climate change. There are numerous schemes to support tree planting for example. However, the required changes such as fleet decarbonisation, improvements to building efficiency, climate change adaptation and modal shifts in transport, have limited

funding and are often confined to pilot projects and modest one-off grants with short lead-in times.

33. Further resource will be required to develop Building Decarbonisation Plans. Officers will develop costed proposals for technical work in the pursuit of Public Sector Decarbonisation funding.

### **Data collection**

34. Improvement in data collection is required to ensure consistency in data, to enable better analysis, comparisons with other authorities, and to identify areas where further work is required. Officers are working on systems improvements.
35. We expect that Environment Act legislation will require Local Authorities to deliver and evidence progress against several targets. Although these targets and duties have not yet been set, we should plan for the formalisation and integration of monitoring into wider Council performance monitoring and data analysis processes. We understand that there will be an increased requirement around data collection on waste disposal in line with the requirement for 'waste tracking,' which will essentially digitise waste disposal data. We believe that future Extended Producer Responsibility payments will be based around diverting waste from landfill and energy from waste plants.

### **Engagement and partnerships - Climate Coalitions**

36. 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. There are currently 214 members across the coalitions.
37. The aim of each coalition is to bring people and organisations together and work collaboratively to help the Borough to deliver the Government's 'net zero target'. That means achieving a balance between the carbon emitted into the atmosphere, and the carbon removed from it. Each coalition is tasked with forming an action plan of activities to help reach the target and create the best possible environment for the next generation with the support of Stockton-on-Tees Borough Council.
  - The Creative Coalition for Climate Change is managed by the ARC and brings together 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
  - 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.
  - The Business Coalition has members from large industry to small SMEs based within Stockton Borough Council boundary. Quorn in Billingham for example has reduced the emissions per tonne of production by 87% compared to 2012 base year and have reduced their water usage by 19% per tonne of product. This is not only a great environmental success story, but it also leads to a more energy efficient business which saves money.
38. The Business Coalition has implemented a 'Greener Business' scheme in collaboration with Stockton BID which encourages businesses to make a pledge to be more sustainable or adopt greener practices. Business who makes a pledge receive a window sticker to display in their business premises.



Fig 11: images of businesses with Green Pledge stickers

39. **Festival of Thrift** - In 2024 the Council hosted the second 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 and 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 and business and partners, whilst delivering a high-quality festival which inspires, brings joy and helps us to imagine a better future together. During the weekend of the Festival of Thrift, Billingham Town Centre saw an increased footfall by 13% from the previous weekend.

## COMMUNITY IMPACT IMPLICATIONS

40. 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

41. The impacts of climate change will affect all communities; it is hard to distinguish between the effect on adults compared to children (including those in our care). However, in general children are more vulnerable and are at greater risk.

For example:

- Children are more vulnerable than adults to the effects of air pollution, due to their size and lung capacity whilst growing.
- Very young children are vulnerable to heat-related deaths including dehydration
- Children are worried about climate change, and this has a negative impact on their mental health.

## **FINANCIAL IMPLICATIONS**

42. 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.
43. On the 19<sup>th</sup> February 2025, Council agreed the Medium Term Financial Plan Update and Strategy. Council agreed to revise the existing £6m prudential borrowing approval for investment in Children's Services residential homes and Spark of Genius and replace with a Council wide investment fund of £20m from prudential borrowing for self-funding capital investments linked to transformation of Services. This could include investments relating to climate change. Individual schemes will need to be approved by Cabinet.
44. Officers continue to seek out external funding opportunities to support decarbonisation.

## **LEGAL IMPLICATIONS**

45. None

## **RISK ASSESSMENT**

46. 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 and our most vulnerable residents disproportionately.
47. Stockton Borough Council have again responded to a FOI request from the charity Climate Emergency UK which will be published later in the year. Whilst we are hoping for an improved score, last year saw the charity rank Stockton council as the 'worst performing unitary authority'. Whilst we have publicly stated that we don't agree with the marking criteria of the scorecards and the weightings given, it is a league table that is published nationally and provides headlines, such as "Teesside councils under the cosh in withering assessment of net zero carbon credentials", Gazette Oct 2023.
48. The risks are currently managed through the implementation of a detailed action plan, an ES&CRS Oversight Group to oversee implementation, careful monitoring of carbon emissions and regular reports to Cabinet.

## **WARDS AFFECTED AND CONSULTATION WITH WARD/COUNCILLORS**

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

## **BACKGROUND PAPERS**

None

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