

# Climate and Environment Actions 2023/24

## Including:

1. Ongoing Transformation actions 2021-30
2. Actions successfully completed in 2022/23
3. New actions included for 2023/24
4. Summary of all 2023/24 Actions
5. 2023/24 Actions categorised by Service

**Project:** Climate and Environment Action Plan 2021-30

**Date:** July 2023

## Appendix: Climate and Environment Actions

### 1. Ongoing Transformation Actions in 2021-30

The Transformation Actions tackle the highest in-house emission sources, and their progress is critical to achieving the carbon neutral target for South Derbyshire District Council.

Transformation Action	Decarbonisation Progress
<b>T1 – Civic Hub</b> <ul style="list-style-type: none"> <li>a) Embedding carbon emission reduction measures into the scheduled maintenance and replacement works of the Civic Hub</li> <li>b) Carbon neutrality decision making of the future of the Civic Hub Project.</li> </ul>	<ul style="list-style-type: none"> <li>a) F Gas replacement schedule has reduced emissions year on year. Two PSDs funding applications have been submitted (individual radiator thermostats and replacement LED lighting), both were unsuccessful.</li> <li>b) Hybrid employee working patterns post covid have reduced carbon emissions through reduced electricity consumption. Corporate Property have commissioned a feasibility assessment (technical and investment) from Nottingham City Council into potential renewable energy sources for Civic Offices.</li> </ul>
<b>T2 – Greenbank Leisure Centre</b> <ul style="list-style-type: none"> <li>a) Ongoing scheduled maintenance and replacement works that reduce carbon emissions</li> <li>b) Feasibility study of renewable energy source options for existing Leisure Centre</li> <li>c) Carbon neutrality decision making of the future of Greenbank Leisure Centre</li> </ul>	<ul style="list-style-type: none"> <li>a) More efficient filters have been installed All pumps have had inverters fitted to increase efficiency, saving 30% in operational costs. Active Nation have developed a 25-point energy reduction action plan. Carbon emission reduction is embedded into impending new contract.</li> <li>b) Ongoing discussion</li> <li>c) Ongoing discussion</li> </ul>
<b>T3 – Etwall Leisure Centre</b> <ul style="list-style-type: none"> <li>a) Ongoing scheduled maintenance and replacement works that reduce carbon emissions</li> <li>b) Feasibility study of renewable energy source options for existing Leisure Centre</li> <li>c) Carbon neutrality decision making of the future of Etwall Leisure Centre</li> </ul>	<p>Etwall Leisure Centre is a more modern structure than Greenbank and because of this is more efficient and has a smaller carbon footprint.</p> <p>Etwall is not under the direct control of SDDC and can only use its influence in investment for decarbonisation.</p> <p>Active Nation have developed a 25-point energy reduction plan</p>
<b>T4A – Waste Vehicle Fleet</b> <ul style="list-style-type: none"> <li>a) Installation of low carbon vehicle infrastructure</li> <li>b) Transition to a low carbon vehicle fleet</li> </ul>	<ul style="list-style-type: none"> <li>a) Agreement &amp; funding secured to install 3 EV charge points at the Boardman Depot, as part of the D2N2 Shared Charging Network Scheme</li> <li>b) SDDC, D2N2 and TMUK Hydrogen Dual Fuel RCV proof of concept project in process for 23/24</li> </ul>

<p><b>T4B – Housing Vehicle Fleet</b></p> <ul style="list-style-type: none"> <li>a) Installation of low carbon vehicle infrastructure</li> <li>b) Transition to a low carbon vehicle fleet</li> </ul>	<ul style="list-style-type: none"> <li>a) Feasibility required to develop an EV charging infrastructure plan for the Housing vehicles, since operators are mobile.</li> <li>b) None</li> </ul>
<p><b>T4C – EH Vehicle Fleet</b></p> <ul style="list-style-type: none"> <li>a) Installation of low carbon vehicle infrastructure</li> <li>b) Transition to a low carbon vehicle fleet</li> </ul>	<ul style="list-style-type: none"> <li>a) Feasibility of using EV charge point budget for installation of 2 dual EV charge points at Civic Office car park</li> <li>b) None</li> </ul>
<p><b>T5 – Boardman Depot Infrastructure</b></p> <ul style="list-style-type: none"> <li>a) Decarbonisation of the Depot premises</li> <li>b) Installation of a hydrogen/EV infrastructure</li> <li>c) Embed carbon neutrality into any future potential decision making for relocating the depot</li> </ul>	<ul style="list-style-type: none"> <li>a) None</li> <li>b) Temporary mobile Hydrogen pilot RCV Project to be based at Boardman Depot site limitations. D2N2 EV shared network funding for installation of 3 EV chargers in 2023</li> <li>c) Strategic Property Services aware</li> </ul>
<p><b>T6 – Rosliston Environmental Exemplar</b></p> <ul style="list-style-type: none"> <li>a) Biomass boiler to be repaired or replaced</li> <li>b) Create and deliver a demonstrator renewable energy programme</li> </ul>	<ul style="list-style-type: none"> <li>a) Budget allocated for Biomass boiler</li> <li>b) Renewable energy sources have been discussed, awaiting further development of Rosliston Forestry Centre vision.</li> </ul>
<p><b>T7 – Develop a programme to decarbonise housing stock</b></p> <p>Continued development of a decarbonisation programme for the complete housing stock</p>	<p>SHDF Wave 1 bid application successful to support a £1.2 million fund to retrofit the worst and most needy 90 households within the SDDC housing stock. The programme has started for SHDF Wave 2 with an additional 110 houses to be retrofitted.</p>
<p><b>T8 – Develop a programme to deliver climate resilience and carbon neutral social housing</b></p> <p>Feasibility study and development programme to deliver carbon neutral housing stock.</p>	<ul style="list-style-type: none"> <li>a) Feasibility study completed on the design of carbon neutral &amp; low energy consumption social housing stock.</li> <li>b) Study on existing housing stock to identify required climate adaption/resilience measures (subsidence, instability due to drying or flooding of foundations).</li> </ul>

## 2. Actions successfully completed in 2022/23

5 actions have been completed in 2022/23 & the success of these is shown below:

Action	Completed and to be taken out of 2023/24
ISP7	Appropriate route optimisation software for SDDC fleet vehicles in Housing and Env Health
T8	Develop a programme to decarbonise worst performing housing stock
ISP13	To create and develop a programme to educate and inform residents/public on using low carbon heating sources
DSP2	Energy efficiency regulations – effective enforcement programme across private rented housing.
ISP25	Review of all Council policies/strategies to embed carbon neutral

## 3. New Actions to be added into 2023/24 Action Plan

8 new actions are to be included in the 2023/24 action plans as shown below:

New Action	New action added for 2023/24
T8	i/ Feasibility study on developing new build carbon neutral & high efficiency social housing ii/ Awareness & delivery of mitigation actions required for social housing because of climate - foundations affected by drying clay
ISP7	EV charging options available for housing team vans
DSP2	Feasibility of developing a mine water district heating system in Swadlincote
ISP13	To develop and create a training programme for Councillors to support awareness & decision making on climate action.
ISP25	Feasibility of developing the Rosliston bungalow as an energy efficiency demonstrator
ISP31	Promotion of recycling within public buildings & reduction of single use plastics at Council organised events
ISP30	Reduce waste & increase recycling & composting
ISP32	End of life SDDC laptops to be refurbished for use in local schools.

## 4. Summary of Actions for 2023/24.

### Transformation Actions - The 8 high emission source actions

Committed Actions – costs are budgeted for		Uncommitted Actions – no current budget				New actions for 2023/24			
Action Ref.	Decarbonisation Actions.	Total Indicative £Cost of Action	DE carbon £cost of Action	Hours	Current tCO <sub>2</sub> e	tCO <sub>2</sub> e Reduction	Start	Finish	Co-benefit
T1	<b>Carbon Neutral Civic Hub Options</b> 1. Retrofit of existing Civic Way. 2. Energy efficient new build.	1. £3 m 2. £8 m	1. £1.2m 2. £2.4m	0	208	208	2024	2030	Reduced energy consumption and operating costs
T2	<b>Carbon Neutral Greenbank Leisure Centre</b> · Energy efficient retrofit measures · Renewable energy source.	£750k	£750k	0	589	589	2024	2030	Reduced energy consumption and operating costs
T3	<b>Carbon Neutral Etwall Leisure Centre</b> · Energy efficient retrofit. · Renewable energy source.	£280k	£280k	0	228	228	2024	2030	Reduced energy consumption and operating costs
T4A	<b>A. Transition to Low Carbon Waste Fleet</b> o EV replacement of small vans. (38) o EV/Hydrogen replacement of trucks (13)	£1.3m £5.2m	£325k £2.6m						Reduce fuel costs
T4B	<b>B. Low Carbon Housing Fleet</b> o EV replacement of small vans. (13)	£422k	£110.5k	0	722	722	2021	2030	
T4C	<b>C. Other Fleet.</b> o Other small vans. (6)	£204k	£51k						
T5	<b>Carbon Neutral Boardman Depot</b> o Renewable energy source - heating o Installation of Hydrogen/EV infrastructure o Potential Depot relocation	£200k £120k £1m plus?	£200k £120k £1m plus	0	75	75	2021	2030	Reduce energy consumption Reduce fuel
T6	<b>Rosliston Environmental Exemplar</b> o Biomass repair or replace o On-site renewable energy source	£117k tbc	0 Tbc	0 0	102 36	102 36	2024 2024	2030 2030	Reduce energy Reduce energy cost
T7*	<b>SDDC Housing Stock Decarbonisation</b> Continued programme to decarbonise SDDC housing stock	tbc	tbc	0	8,000*	tbc	2021	2050	Reduce energy consumption and cost
T8*	Develop a programme to deliver climate resilience and carbon neutral social housing	tbc	tbc	0	1,200*	tbc	2024	2050	Reduce energy consumption and cost
<b>Totals</b>		<b>£10 – £15m</b>	<b>£6-£7m</b>	<b>0</b>	<b>2,500</b>	<b>2,020</b>	<b>2021</b>	<b>2050</b>	

\*T7 and T8 CO<sub>2</sub>e emissions are classed as District-wide emissions and as such are not included in the 2018/19 In-house emissions baseline (2,500 tCO<sub>2</sub>e).

**In-house Service Plan Action Summary 2023/24** -The 33 In-house Actions aligned to individual Council Services as part of their 2023/24 Service Plans.

Action Ref.	Decarbonisation Action	Total indicative £cost of Action	DE carbon £cost of Action	Hours	Current tCO <sub>2</sub> e	tCO <sub>2</sub> e Reduction	Start	Finish	Co-Benefit
	<b>Buildings and Heat decarbonisation</b>								
ISP1	Improving the data content of the Social Housing Stock condition survey data	0	0	300	tbc	tbc	2023	2024	Fuel saving
ISP2	Maintenance programme for all public building estate linked to decarbonisation	£300k	£150k	0	152	tbc	2021	2024	Energy reduction
ISP3	Embed carbon neutral in new SDDC Local Plan	0	0	300	tbc	tbc	2021	2024	Energy reduction
ISP6	Creating and developing a Low Carbon Homes Team that supports home decarbonisation across the District	£100k	£100k	3,000	tbc	tbc	2022	2024	Energy reduction
ISP25	Feasibility of developing the Rosliston bungalow as an energy efficiency demonstrator	tbc	tbc	500	tbc	tbc	2023	2024	Energy reduction
	<b>Transport and Fleet decarbonisation</b>								
ISP4	Ongoing delivery of the Sustainable Travel Plan and the annual Sustainable Travel Questionnaire	£40k	0	300 pa	26	2	2021	2024	Energy reduction
ISP5	Review fleet Procurement to transition to low/zero carbon vehicles	0	0	300	722	0	2021	2024	Fuel reduction
ISP7	EV charging options available for housing team vans	tbc	tbc	Tbc	tbc	tbc	2023	2024	Fuel saving
	<b>Energy decarbonisation</b>								
ISP8	Transition to electric grounds maintenance machinery	£250k	£125k	0	tbc	10	2021	2024	Fuel saving
ISP9	Install Smart metering at all Council buildings	£5k	£5k	0	477	48	2021	2025	Electricity saving
ISP10	Leisure Centre electricity reduction and review	0	0	50	216	22	2021	2024	Electricity saving
ISP11	Ongoing Leisure Centre maintenance plan for emission reduction	tbc	0	50	1202	120	2021	2024	Energy saving
SPI12	F gas replacement/efficiency across Council buildings*	tbc	tbc	0	485	242	2021	2030	Reduce pollution
	<b>Finance decarbonisation</b>								
ISP14	Carbon review of procurement process	0	0	30	tbc	tbc	2021	2024	Social Value
ISP15	Investment review to embed decarbonisation	0	0	50	0	0	2021	2024	Higher returns
ISP16	Review of costings and financing of Transformative Actions	0	0	500	0	0	2021	2024	None
	<b>Community Engagement</b>								
ISP13	Create a climate & environment training/awareness programme for Councillors	0	0	500	0	0	2023	2024	Social value
ISP18	Ongoing Environmental/Carbon Literacy training	0	0	400 pa	0	0	2021	2024	Social value
ISP19	Embed carbon emission reduction into the new Economic Development Plan for SDDC	0	0	300 pa	0	0	2022	2024	Social value
ISP20	Rosliston Exemplar Sustainable Hub Plan	0	0	500	136	0	2021	2024	Revenue channel
	<b>Biodiversity and Environment</b>								
ISP21	Alteration to grounds maintenance practices	0	0	50	tbc	tbc	2021	2024	Fuel/time reduction
ISP26	Monitoring biodiversity net gain – mapping all green spaces owned by SDDC	0	0	300 pa	tbc	tbc	2022	2024	Carbon offsetting

ISP28	Ongoing development of a methodology to estimate the carbon sequestration of council owned green areas across the district	0	0	300 pa	tbc	tbc	2022	2024	Carbon offsetting
	<b>Performance and Governance</b>								
ISP22	Continuous Review of climate change funding and grants	£1k	0	100 pa	0	0	2021	2024	Cost benefit
ISP23	Annual carbon review of SDDC suppliers (Scope 3) and develop a supply chain reduction guidance	0	0	200 pa	tbc	tbc	2021	2024	None
ISP24	Ongoing monitoring and reporting of carbon emissions and delivery of an annual carbon report	0	0	500 pa	2,500	125	2021	2024	Reduce energy
ISP27	Annual review of SDDC Climate and Environment Action Plan (2021/30)	0	0	50pa	2,500	0	2022	2030	None
ISP17	Develop a full equality, diversity and inclusion impact assessment of SDDC's Climate and Environment Action Plan	0	0	100 pa	0	0	2022	2024	Social value
	<b>Waste</b>								
ISP30	Ongoing waste collection service review to support reduction in waste and increase in recycling and composted	0	0	100 pa	tbc	0	2022	2024	Waste reduction
ISP31	Promotion of recycling within public buildings & reduction of single use plastics at Council organised events	0	0	100	tbc	0	2023	2024	Waste reduction
ISP32	End of life SDDC laptops to be refurbished for use in local schools.	0	0	100	tbc	0	2023	2024	Waste reduction
	<b>Communications</b>								
ISP29	Develop an annual Climate and Environment Communication Plan	0	0	200	2,500	0	2021	2024	None

\*This estimate does not include the F gas replacement, for which an accurate figure is not yet available.

### **District-wide Service Plan Action Summary 2023/24** – The 19 District-wide actions aligned to individual Council Services as part of their Service Plans for 2023/24.

Action Ref.	Decarbonisation Actions	Total Indicative £costs of Action	DE carbon £cost of Action	Hours	Current tCO2e	tCO2e Reduction	Start	Finish	Co-benefit
	<b>Energy decarbonisation</b>								
DSP1	SDDC Healthy homes assistance funding programme for private domestic housing energy efficiency and supporting fuel poverty reduction	£200k	0	2000	Tbc	Heating decarbonisation	2021	2024	Reduce energy
DSP2	Feasibility of developing a mine water district heating system in Swadlincote	£100k	tbc	500	tbc	Heating decarbonisation	2023	2024	Eliminate energy costs
DSP3	Identify opportunities to support the development of renewable energy sources and track large scale renewable developments across South Derbyshire	0	0	100 pa	Tbc	Renewable energy source	2022	2024	Eliminate energy costs
DSP4	Green Home Grant/LAD funding delivery of retrofit measures to private and tenanted houses.	£2.5m	0	1,500	Tbc	Renewable energy sources	2021	2024	Eliminate energy costs
DSP19	Creating and developing a forum for energy consumption reduction advice for South Derbyshire residents	0	0	200pa	tbc	Heating decarbonisation	2022	2024	Reducing energy costs
	<b>Transport decarbonisation</b>								
DSP5	EV funding and infrastructure programme for South Derbyshire	£200k	0	200	Tbc	Transport decarbonisation	2021	2024	Reducing motoring costs

DSP6	Develop a feasibility study to support the transition of South Derbyshire private taxi service to low carbon emission vehicles	0	0	200 pa	Tbc	Transport decarbonisation	2022	2024	Reduce fuel costs
DSP7	Review of hydrogen fuel production and infrastructure across South Derbyshire	0	0	500	Tbc	Renewable energy source	2022	2024	Share hydrogen refuelling costs
	<b>Biodiversity and Environment</b>								
DSP8	Utilise Free Tree Schemes	0	0	100 pa	Tbc	Carbon sequestration	2021	2024	Tree canopy, flood resilience
DSP10	Supporting the promotion of green tourism throughout South Derbyshire	0	0	100	Tbc	Carbon sequestration	2022	2050	Increase tourism economy
	<b>Climate Adaption</b>								
DSP9	Review and detail the climate adaption actions (tree planting and flood resilience) that SDDC are taking across the District	0	0	300 pa	Tbc	Adaption	2022	2024	Future proofing
	<b>Green Economic Growth</b>								
DSP11	Work in partnership with Derbyshire CC to create a collaborative pathway to carbon zero across Derbyshire	£10k	£0	500 pa	Tbc	Reduce all emission sources	2022	2024	Share costs
DSP12	Partner with Derbyshire CC to engage with UK Government for resource, funding, and relevant powers to deliver Climate and Environment Plans.	0	0	100 pa	Tbc	n/a	2022	2024	Collaboration of resource
DSP13	Create and promote a Sustainable Travel to work Plan for job creation	0	0	100	Tbc	Transport decarbonisation	2021	2025	Improve economy
DSP14	Freeport Plan influencing, promoting, and partnering with local business to deliver green innovation and technology	0	0	200	Tbc	Transport decarbonisation	2020	2025	Improve economy
	<b>Community Engagement</b>								
DSP15	Develop a business engagement programme to support decarbonisation projects.	0	0	200 pa	Tbc	n/a	2021	2030	Improve economy
DSP16	Create a community engagement programme around Climate Change	£20k	£20k	500	Tbc	Carbon footprint reduction	2021	2030	Community pride
DSP17	Support the implementation of the community engagement programme (SD18)	tbc	tbc	tbc	Tbc	Carbon footprint reduction	2021	2030	Community pride
DSP18	Embed Active Travel in Swadlincote town centre access plan.	0	0	tbc	Tbc	Transport decarbonisation	2021	2025	Active travel

## 4.Climate and Environment Service Plan Actions (2023/24)

### Transformation Actions 2023/24 - IT and Business Change

	<b>Action Ref: T1</b>	<b>Embed decarbonisation in Civic Hub Project</b>	
Timeframe	<b>2021 - 2023</b>	<b>2024 - 2027</b>	<b>2028 - 2030</b>
Action	Continued evolving review of the two decarbonisation options - New build or Retrofit of existing Civic Office.	Decision made on option and planning completed	Implement decision. New build or existing retrofit established with carbon neutral footprint.
Reduction	8-10% reduction in total emissions.	0	208 tCO2e (carbon neutral)
Indicative Total Cost	200 hours	200 hours	Retrofit £2m - £3m. New build £6m - £8m
Decarbonisation Costs	0	0	Retrofit: £1.2m – £1.8m (60% of total cost) New build: £2.4m - £3.2m (40% of total cost).

	<b>Action Ref: T2</b>	<b>Greenbank Leisure Centre decarbonisation</b>
Timeframe	<b>2021 -2023</b>	<b>2024 - 2030</b>
Action	<ol style="list-style-type: none"> <li>Current ongoing interim actions to reduce emissions.</li> <li>Feasibility study of renewable energy source options.</li> <li>Decision made on emission reduction plan.</li> </ol>	Transition from natural gas to renewable source for heating and electricity consumption.
Reduction	Interim actions = 8-10% emission reduction	Heating renewable source= 439 tCO2e (100% reduction) F Gas reduction = 148 tCO2e (64.5% reduction) Heating and electricity renewable source = 589 tCO2e (100% reduction)
Indicative Total Cost	500 hours	£750k
Decarbonisation Costs	0	£750k

	<b>Action Ref: T3</b>	<b>Etwall Leisure Centre decarbonisation</b>
Timeframe	<b>2021 -2023</b>	<b>2024 - 2030</b>
Action	<ol style="list-style-type: none"> <li>Current Interim actions on reducing emissions.</li> <li>Feasibility study of renewable energy source options.</li> <li>Decision made on emission reduction plan.</li> </ol>	Transition from natural gas to renewable source for heating.  Or transition to renewable source for heating and electricity.
Reduction	Current emissions = 383 tCO2e Reduction of Interim actions = 31 tCO2e (8 -10%)	Current heating and electricity emissions = 228 tCO2e F Gas reduction = 155 tCO2e
Indicative Total Cost	500 hours	£280k plus
Decarbonisation Costs	0	£280k plus
Note	1. John Port School own Etwall Leisure Centre, so partnership approach.	

	<b>Action Ref: T4A</b>	<b>Decarbonisation of Waste Vehicle Fleet.</b>	
Timeframe	<b>2021 - 2023</b>	<b>2024 - 2027</b>	<b>2028 - 2030</b>

Action	Phased transition replacement of depot light vehicles (cars, vans, etc).	Hydrogen Fuel mix conversion for refuse trucks = £45k/truck	Full electrification or 100% Hydrogen for refuse trucks + electrification of depot vehicles.
Reduction	100% reduction of depot vehicle emissions only.	40% reduction of current refuse truck emissions only.	100% reduction of fleet emissions (588 tCO2e)
Total Indicative Cost	38 EV vans = £1.22m EV charging points = £80k  Total cost = £1.3m	13 x truck conversion = £585k Hydrogen filling station = £120k?  Total cost = £705k	13 x EV/Hydrogen trucks = £5.2m EV charge point = £50k  Total cost = £5.2m
Decarbonisation Cost	£325k	£705k	£2.7m
Note	EV infrastructure required.	Depot Hydrogen refilling station	Full EV or Hydrogen infrastructure.

Action Ref:	<b>T4B - Decarbonisation of Housing vehicle fleet.</b>
Emission Source	Carbon emissions from Housing fleet fuel = 134 tCO2e
Owned by	Head of Housing
Dates	Start: 2021 Finish: 2030
Emission Impact	Complete electrification or hydrogen fuelled housing vehicle fleet = carbon neutral
Notes	EV infrastructure needed for home charging. Or change in work behaviour and EV's 'return to grid' infrastructure' requiring overnight parking. Partner with DCC on 'on-street parking'.
Indicative Total Costs	13 x small EV vans = £422k + 10 x Charge points = £22k Total costs = £444k
Decarbonisation Costs	EV vans = £110.5 + charge points = £22k Decarbonisation costs = £132.5k

Action Ref:	<b>T4C – Decarbonisation of EH vehicle fleet.</b>
Emission Source	Carbon emissions from other fleet (Environmental Health)
Owned by	Head of Environmental Health
Dates	Start: 2021 Finish: 2030
Emission Impact	Complete electrification or hydrogen fuelled small fleet by 2030.
Notes	Electric infrastructures need for Civic Way Offices and Rosliston – awaiting decision on One public estate 2021/22
Indicative Total Costs	6 x EV vans = £204k + 2 x Charge point = £5k Total costs = £209k
Decarbonisation Costs	EV vans = £51k + charge points = £5k Decarbonisation costs = £56k

	<b>Action Ref: T5</b>	<b>Boardman Depot</b>
Timeframe	<b>2021 -2023</b>	<b>2024 - 2030</b>
Action	Current Interim actions on reducing emissions.  Feasibility study of renewable energy source options.  Decision made on emission reduction plan.  Feasibility study of Hydrogen/Electric fuelling station &/or Depot relocation.	Transition from natural gas to renewable source for heating and electricity.  Installation of low carbon fuelling infrastructure (Hydrogen &/or EV)  Potential Depot relocation.
Reduction	Interim actions = 8-10% emission reduction	Heating and electricity renewable source = 42 tCO2e (100% reduction)  Installation of low carbon fuelling infrastructure  Depot relocation – carbon neutral
Total Indicative Costs	500 hours	£200k renewable energy source £120k plus for Hydrogen/EV fuelling station. £? Relocate depot

Decarbonisation Costs	0	100% of total costs and dependant on option
-----------------------	---	---

	<b>Action Ref: T6</b>	<b>Rosliston (Visitor Centre and Enterprise building)</b>
Timeframe	<b>2021 -2023</b>	<b>2024 - 2030</b>
Action	Current Interim actions on reducing emissions.  Feasibility study of renewable energy source options.  Decision made on emission reduction plan.	Biomass repair  Renewable energy infrastructure for complete Rosliston site (holiday homes, visitor centre, etc)  Creation of Rosliston Exemplar
Reduction	Interim actions = 8-10% emission reduction	Heating and electricity renewable source = 136 tCO2e (100% reduction)
Total indicative Costs	200 hours	Repair of Biomass boiler = £117k Renewable energy source (solar pv or heat source pumps) = £100k

Action Details	<b>T7 – Continued programme to decarbonise the SDDC housing stock through Government Funding and the Housing Revenue Account.</b>
Emissions Source	Council owned housing stock
Owned by	Head of Housing
Dates	Start: 2021 Finish: 2050
Emission Impact	TBD
Cost	£43m (based on £15k each for 3,000 properties)

Action Details	<b>T8 – Develop a programme to deliver a climate resilience adaption to affected existing social housing and develop new carbon neutral social housing stock.</b>
Emissions Source	Existing housing stock
Owned by	Head of Housing
Dates	Start: 2023 Finish: 2050
Emission Impact	TBD
Cost	tbc

## All Service Plan Actions 2023/24

These two actions are common to all Service areas.

Action Details	ISP4 – Ongoing annual delivery of Sustainable Travel Plan and annual travel questionnaire
Emissions Source	Employee vehicle commuting fuel emissions at all SDDC locations = 26 tCO2e
Owned by	All Heads of Service
Dates	Start: 2021 Finish: 2024
Emission Impact	Targeted reduction of H1 carbon emissions = 7% (1.8 tCO2e)
Cost	£40,000 & 300 hours

Action Details	ISP24 – Ongoing quarterly monitoring of Climate & Environment Action Plan and preparation of annual reporting of all carbon emission sources from Council in-house controlled activities
Emissions Source	All carbon emission sources: Heat, Refrigerant, Vehicle fuel and Electricity = 2,500 tCO2e
Owned by	All Heads of Service
Dates	Start: April 2021 Finish: Ongoing
Emissions Impact	Estimated reduction of all carbon emissions = 5% (125 tCO2e)
Cost	300 hours

## Corporate Property - Service Plan Actions 2023/24

### In-house actions

Action Details	ISP2 – Embed decarbonisation of public buildings in the planned maintenance strategy
Emissions source	Heat and electricity emissions from all Public and SDDC owned Commercial buildings.
Owned by	Head of Corporate Property
Dates	Start: April 2021 Finish: April 2030
Emission Impact	Reduction of Public Buildings emissions (152 tCO <sub>2</sub> e) to achieve carbon neutral
Cost	£300k – additional costs in addition to the ongoing maintenance programme.

Action Details	ISP9 – Ongoing commissioning of SMART metering across all public buildings (excluding social housing)
Emissions Source	Electricity emissions from all Council buildings
Owned by	Head of Corporate Property
Dates	Start: April 2021 Finish: April 2025
Emission Impact	Up to 10% reductions in energy use through accurate emission reporting, increased awareness, and accountability for carbon emissions from Council energy activities
Cost	£5K

Action Details	ISP11 – Align ongoing maintenance plan to reducing current carbon emissions at Leisure Centres from the Lifecycle Analysis (existing plant, retrofit measures and investment requirements to reduce emissions).
Emissions Source	Energy/heat/electricity at Greenbank and Etwell Leisure Centres = £1202 tCO <sub>2</sub> e
Owned by	Head of Cultural and Community Services
Dates	Start: April 2021 Finish: April 2024
Emissions Impact	Reduction of current energy emissions of 120 tCO <sub>2</sub> e (10%)
Cost	50 hours, Maintenance, retrofit, and investment requirements need to be costed as part of the plan.

Action Details	ISP12 – F Gas ongoing maintenance, update, and replacement programme.
Emissions Source	Refrigerant emissions at Leisure Centres, Civic Way and Boardman Road depot.
Owned by	Head of Corporate Property
Dates	Start: 2021 Finish: 2030
Emission Impact	242 tCO <sub>2</sub> e based on a 50% reduction in total F gas emissions
Cost	To Be Confirmed

### District-wide actions

Action Details	DSP18 – Feasibility plan to embed Active Travel (walk/cycle pathways, EV infrastructure and public transport connectivity) into Swadlincote town centre access plans.
Emissions Source	Transport
Owned by	Head of Corporate Property/Head of Environmental Services
Dates	Start: 2022 Finish: 2024
Emission Impact	Transport reduction and increasing walking and cycling.
Cost	£40k & 100 hours

## Cultural and Community Services - Service Plan Actions 2023/24

### In-house actions

Action Details	ISP10 – Manage ongoing energy reduction actions plans for the Leisure Centres through operational contractors.
Emissions Source	Heat and electricity at Greenbank and Etwall Leisure Centres = 1,202 tCO <sub>2</sub> e
Owned by	Head of Cultural and Community Services
Dates	Start: June 2021 Finish: April 2024
Emissions Impact	Behavioural change heat and electricity emissions reductions of 120 tCO <sub>2</sub> e (10%)
Cost	50 hours

Action Details	ISP20 – Rosliston Exemplar - promote Rosliston Forestry Centre as a pioneer of environmental sustainability education which includes renewable energy sources, low carbon emission technology, carbon sequestration, biodiversity and natural capital improvement.
Emissions Source	Heat and electricity sources plus tree and plant carbon sequestration.
Owned by	Head of Cultural and Community Services
Dates	Start: April 2021 Finish: April 2024
Emission Impact	To make Rosliston nett carbon positive
Cost	500 hours

Action Details	ISP21 – Ongoing planning and delivery of alteration to grounds maintenance practices to maximise biodiversity
Emissions Source	Carbon sequestration from all sectors across South Derbyshire
Owned by	Head of Cultural and Community Services/ Head of Operational Services
Dates	Start: April 2021 Finish: April 2024
Emission Impact	Improves biodiversity, which increase soil ability to sequester carbon.
Cost	50 hours

Action Details	ISP26 – Monitoring Biodiversity net gain – mapping all green spaces owned by SDDC
Emissions Source	Carbon sequestration
Owned by	Head of Culture and Community Services
Dates	Start: 2022 Finish: 2024
Emission Impact	Carbon sequestration
Cost	500 hours

### District-wide Actions

Action Details	DSP8 – Utilise all Free Tree planting schemes across the District and monitor tree planting increases.
Emissions Source	Carbon sequestration from all sectors across South Derbyshire
Owned by	Head of Cultural and Community Services
Dates	Start: 2021 Finish: 2024
Emissions Impact	Estimated 6.2 tCO <sub>2</sub> e per year per hectare sequestered
Cost	100 hours

## Economic Development and Growth Services - Service Plan Action 2023/24

### In-house actions

Action Details	ISP19 Embed carbon emission reduction into the new Economic Development Plan
Emissions Source	All In-house and District-wide emissions
Owned by	Head of Economic Development & Growth/Head of Env Health
Dates	Start: April 2022 Finish: April 2025
Emissions Impact	Engage public and private sector expertise to help deliver SDDC emissions reductions
Cost	300 hours

### District-wide actions

Action Details	DSP10 – Support the promotion of Green Tourism throughout South Derbyshire and specifically National Forest as an exemplar sustainable environment
Emissions Source	None
Owned by	Head of Economic Development
Dates	Start: 2021 Finish: 2024
Emission Impact	Increasing carbon offsetting across South Derbyshire.
Cost	100 hours

Action Details	DSP13 – Promote sustainable travel to work plans (public transport) for job creation/growth development areas across South Derbyshire.
Emissions Source	Vehicle
Owned by	Head of Economic Development and Head of Strategic Planning
Dates	Start: 2021 Finish: 2025
Emission Impact	Reduce vehicle mileage and promote public transport
Cost	100 hours

Action Details	DSP14 – Influencing, promoting, and partnering with local business to embed green innovation and technology at the East Midlands Inter-Modal Park 'Freeport'.
Emissions Source	Road and Rail transport
Owned by	Head of Economic Development/Head of Planning and Strategic Housing Services
Dates	Start: 2021 Finish: 2025
Emission Impact	Creation of green technology hubs to reduce emissions
Cost	TBD

Action Details	DSP15 – Support local businesses across South Derbyshire in their development of energy efficiency and decarbonisation projects and the identification of suitable green funding.
Emissions Source	All carbon sources
Owned by	Head of Economic Development /Head of Environmental Health
Dates	Start: 2021 Finish: Ongoing
Emission Impact	All sources across South Derbyshire
Cost	100 hours

## Environmental Health Services - Service Plan Actions 2023/24

### In-house Actions.

Action Details	ISP6 – Ongoing development of a Low Carbon Homes Team that supports household decarbonisation across the whole of South Derbyshire
Emissions Source	Household heating
Owned by	Head of Environmental Health Services/Housing Services
Dates	Start: 2022 Finish: 2024
Emission Impact	Reduction household heat emissions
Cost	4000 hours

Action Details	ISP13 – Develop and create a climate and environmental training programme for Councillors to support the awareness and decision making on climate action.
Emissions source	All
Owned by	Head of Environmental Services
Dates	Start: 2023 Finish: Ongoing
Emissions Impact	Higher awareness for all Councillors for reducing personal and corporate carbon impact and carbon footprint
Cost	400 hours

Action Details	ISP14 – Quarterly monitoring of the SDDC tender/procurement process to establish carbon neutral supplier questions and carbon neutral scoring/awarding criteria
Emissions Source	All
Owned by	Head of Environmental Services
Dates	Start: April 2022 Finish: April 2024
Emissions Impact	Increase the importance of carbon accounting and reduce carbon emissions through future procurement decisions and supplier selection.
Cost	30 hours

Action Details	ISP18 – Ongoing environmental training (Climate and Biodiversity) for SDDC employees.
Emissions source	All
Owned by	Head of Environmental Services
Dates	Start: April 2021 Finish: Ongoing
Emissions Impact	Higher awareness for all staff of the importance of reducing personal and corporate carbon impact and carbon footprint
Cost	400 hours

Action Details	ISP22 – Continuous identification of funding and grants, identifying carbon reduction opportunities for the Council and Partners.
Emissions source	All
Owned by	Head of Environmental Services
Dates	Start: April 2021 Finish: Ongoing
Emissions Impact	Funding decarbonisation actions
Cost	£1,000 and 100 hours

Action Details	ISP23 – Annual review of SDDC 'Scope 3' Supply Chain emissions, quantify their carbon impact and develop an appropriate draft supply chain guidance for approval.
Emissions Source	All sources.
Owned by	Head of Environmental Services
Dates	Start: April 2022 Finish: April 2024
Emissions Impact	Identify emission reduction opportunities with contractors and suppliers

Cost	200 hours
Action Details	ISP25 – Feasibility study on developing the Rosliston bungalow into aa energy efficiency demonstrator
Emissions source	All
Owned by	Head of Environmental Services
Dates	Start: 2023 Finish: 2024
Emissions Impact	Heating emission sources
Cost	500 hours

Action Details	ISP27 - Annual review of SDDC Climate and Environment Action Plan (2021/30) to update and verify in line with ISO accreditation and other audits.
Emissions source	All
Owned by	Head of Environmental Health and all Heads of service
Dates	Start: July 2022 Finish: ongoing on an annual basis.
Emissions Impact	Ongoing support of reduction of all emissions from in-house and district-wide emissions
Cost	50 hours

Action Details	ISP28 – Continued development of a methodology to estimate the carbon sequestration of council owned green areas across South Derbyshire
Emissions Source	Carbon sequestration
Owned by	Head of Environmental Health Services/ Cultural and Community Services
Dates	Start: 2022 Finish: 2024
Emission Impact	Sequestration & offsetting
Cost	300 hours

Action Details	ISP31 – Promotion of recycling within public buildings & reduction of single use plastics at Council organised events
Emissions Source	Waste collection
Owned by	Head of Environmental Services
Dates	Start: April 2023 Finish: April 2024
Emission Impact	Reduction in waste emissions
Cost	100 hours

Action Details	ISP32 – Create a programme to refurbish end of life Council laptops to be used in local schools
Emissions Source	Waste collection
Owned by	Head of Environmental Services
Dates	Start: 2023 Finish: 2025
Emission Impact	Reduction in waste emissions
Cost	100 hours

## District-wide Actions

Action Details	DSP1 – SDDC Healthy Homes Assistance Fund for private and tenant housing energy efficiency and supporting fuel poverty reduction.
Emissions Source	Domestic heating for private and tenanted houses
Owned by	Head of Environmental Services
Dates	Start: March 2021 Finish: March 2023
Emissions Impact	TBD
Cost	£200k

Action Details	DSP2 – Feasibility of developing Mine Water Heating network in Swadlincote
Emissions Source	Heat & Energy
Owned by	Head of Environmental Services

Dates	Start: 2023 Finish: Ongoing
Emissions Impact	TBD
Cost	300 hours officer time

Action Details	DSP3 – Ongoing development of a database of existing and approved renewable energy sources across South Derbyshire which can be used in future policy considerations to support decision making around sustainable renewable energy developments within the planning policy. Track the overall renewable energy production capacity of South Derbyshire & identify opportunities to support local businesses to develop their own renewable energy sources.
Emissions Source	Energy Sources
Owned by	Head of Environmental Health Services/Head of Planning and Strategic Housing
Dates	Start: 2022 Finish: 2024
Emission Impact	Reduction of carbon emission through renewable energy sources
Cost	200 hours

Action Details	DSP4 – Green Homes Grant/LAD funding delivery of retrofit measures to private and tenant houses.
Emissions Source	Domestic heating for private and tenanted houses
Owned by	Head of Environmental Services
Dates	Start: 2021 Finish: Ongoing
Emissions Impact	TBD
Cost	Phase 1b=£568k, Phase 2 = £425k

Action Details	DSP5 – Public EV infrastructure expansion – Planning and Implementing of EV charging points across the District, through OZEV and partnership funding
Emissions Source	Non-HGV transport
Owned by	Head of Environmental Services
Dates	Start: 2021 Finish: 2024
Emissions Impact	TBD
Cost	£100k (depending on successful bid for external funding) & 200 hours

Action Details	DSP7 – Ongoing review of Hydrogen fuel usage, production and distribution infrastructure development proposals across South Derbyshire.
Emissions Source	Transport
Owned by	Head of Environmental Services
Dates	Start: 2022 Finish: 2024
Emission Impact	Reduction in fleet carbon emissions
Cost	200 hours

Action Details	DSP9 – Ongoing review and detail the climate adaption actions (tree planting and flood resilience plus others) that SDDC are taking across the District.
Emissions Source	Carbon sequestration from all sectors across South Derbyshire
Owned by	Head of Environmental Health Services
Dates	Start: 2022 Finish: 2024
Emissions Impact	TBD
Cost	200 hours

Action Details	DSP11 Work in partnership with Derbyshire County Council to create a collaborative pathway to carbon zero across Derbyshire
Emissions Source	All
Owned by	Head of Environmental Services
Dates	Start: 2021 Finish: Ongoing
Emissions Impact	Unknown
Cost	100 hours

Action Details	DSP12- Partner with Derbyshire County Council to engage with UK Government for resource, funding and relevant powers to deliver Climate and Environment Plans
Emissions Source	All
Owned by	Head of Environmental Services
Dates	Start: 2021 Finish: Ongoing
Emissions Impact	Unknown
Cost	100 hours
Action Details	DSP19 Ongoing development of a communication/signposting channel for engaging with South Derbyshire households to support reduction of energy consumption advice promotion.
Emissions Source	All households
Owned by	Head of Environmental Health Services
Dates	Start: 2022 Finish: 2024
Emissions Impact	TBD
Cost	200 hours

## Finance - Service Plan Actions 2023/24

### In-house actions.

Action Details	ISP15 – Ongoing review of Council finance and investments to embed in carbon neutrality
Emissions Source	De-investment in fossil fuel sector
Owned by	Head of Finance
Dates	Start: April 2021 Finish: April 2024
Emission Impact	Investment in green economy
Cost	50 hours plus a potential improved return on investment.

Action Details	ISP16 – Ongoing review of costing/finance of Climate and Environment Transformative actions to establish/verify current and future funding sources to implement these actions.
Emissions Source	All high emission sources and locations identified.
Owned by	Head of Finance /Head of Environmental Health
Dates	Start: 2021 Finish: 2024
Emission Impact	All high emission sources.
Cost	500 hours

## Housing Services - Service Plan Actions 2023/24

### In-house actions.

Action Details	ISP1 – Ongoing Improvement of content, quality and quantity of the Social Housing Stock Condition Survey data.
Emissions Source	Heat and electricity - this is outside of the SDDC's controlled emissions and not part of the 2030 carbon neutral target.
Owned by	Head of Housing Services
Dates	Start: 2022 Finish: July 2028
Emission Impact	Current heat and electricity emission estimate is 9,200 – 13,200 tCO <sub>2</sub> e
Cost	500 hours

Action Details	ISP7 – Development of EV charging options available for the transition of housing fleet to electric
Emissions Source	Fleet fuel
Owned by	Housing
Dates	Start: 2023 Finish: 2024
Emission Impact	Reduction in fleet emissions
Cost	100 hours

Action Details	ISP13 – Create and develop a programme to educate and inform residents/public on using low carbon heating sources effectively
Emissions Source	Household heating
Owned by	Head of Housing
Dates	Start: April 2022 Finish: April 2024
Emissions Impact	Reduction in electricity emissions as National Grid decarbonises to 2030.
Cost	50 hours to implement.

## Operational Services - Service Plan Actions 2023/24

### In-house actions.

Action Details	ISP5 - Review of the Fleet Procurement Plan to identify and detail the options, cost, and timeframe to decarbonise the SDDC Waste vehicle fleet (EV's, Hydrogen/diesel mix and Hydrogen). This review will include the infrastructure and storage requirements of decarbonising the fleet.
Emissions Source	Vehicle fuel (diesel) at Boardman Depot = 588 tCO <sub>2</sub> e
Owned by	Head of Operational Services
Dates	Start: April 2021 Finish: April 2024
Emission Impact	Reduction Operational fleet emissions to carbon neutral = 588 tCO <sub>2</sub> e
Cost	300 hours

Action Details	ISP8 – Continued phased replacement of grounds maintenance machinery (105 x mowers, grass-cutters, etc) with electric alternatives.
Emissions Source	Fuel at Boardman Road depot
Owned by	Head of Operational Services
Dates	Start: June 2021 Finish: April 2024
Emission Impact	Reduction of carbon emissions = 10 tonne CO <sub>2</sub> e (estimated)
Cost	£250,000 for completed replacement (indicative).

Action Details	ISP30 – Ongoing waste collection service review to support the reduction in waste and increase in recycling rates and composted rates
Emissions Source	Waste collection
Owned by	Head of Operational Services
Dates	Start: April 2022 Finish: April 2024
Emission Impact	Reduction in waste emissions
Cost	100 hours

## Organisational Development and Performance - Service Plan Actions 2023/24

### In-house actions.

Action Details	ISP17 – Develop a full equality, diversity and inclusion impact assessment of SDDC’s Climate and Environment Action Plan
Emissions Source	All
Owned by	Head of Organisational Development and Performance
Dates	Start: 2023 Finish: 2024
Emission Impact	All
Cost	500 hours

Action Details	ISP29 – Continued development of Climate and Environment Communication Plan to inform, educate and make all stakeholders aware of Environmental Sustainability, Climate Change, Carbon emission sources, decarbonisation measures and carbon neutral journey. Stakeholders – SDDC employees, Councillors, Residents (climate activists, pragmatists, and deniers), specific demographics, Businesses, other Local Authorities, and third-party organisations
Emissions source	All
Owned by	Head of Organisational Development and Performance/Head of Environmental Health
Dates	Start: 2021 Finish: Annual ongoing
Emissions Impact	Ongoing support of reduction of all emissions from in-house and district-wide emissions
Cost	200 hours staff time per year

### District-wide Actions

Action Details	DSP16 – Annual creation of a community engagement program for Climate Change across South Derbyshire that will engage and consult with different sectors and communities with the SDDC’s carbon neutral journey and the specific actions that are required to deliver the 2030 target.
Emissions Source	All sources across South Derbyshire
Owned by	Head of Organisational Development and Performance
Dates	Start: 2021 Finish: 2030
Emission Impact	Encouraging carbon footprint reduction
Cost	£20k + additional 0.5 FTE

Action Details	DSP17 – Ongoing support of developing the community engagement program (DSP16) for Climate and Biodiversity Change across South Derbyshire supporting the decarbonisation of South Derbyshire.
Emissions Source	All sources across South Derbyshire
Owned by	Head of Environmental Health and Organisational Development and Performance
Dates	Start: 2022 Finish: 2023
Emission Impact	Encouraging carbon footprint reduction
Cost	TBD

## Planning and Strategic Housing Services – Service Plan Actions 2023/24

### In-house actions.

Action Details	ISP3 – Embed carbon neutrality in the new SDDC Local Plan.
Emissions Source	Energy efficiency, Gas, electricity, and water supply from all sources and into all buildings. Includes Heat, electricity, and transport emission sources.
Owned by	Head of Planning and Strategic Housing
Dates	Start: 2021 Finish: 2024
Emission Impact	Reduction in carbon emissions in all new build
Cost	300 hours

### District-wide actions.

Action Details	DSP13 – Ongoing creation and promotion of sustainable travel to work plans (sustainable) for job creation/growth areas
Emissions Source	Vehicle
Owned by	Head of Economic Development and Head of Planning and Strategic Housing
Dates	Start: 2021 Finish: 2025
Emission Impact	Reduce vehicle mileage and promote public transport
Cost	100 hours

Action Details	DSP14 – Plan on Influencing and promoting the embedding of carbon reduction and climate resilience mitigation into the East Midlands Inter-Modal Park 'Freeport'.
Emissions Source	Road and Rail transport
Owned by	Head of Economic Development/Head of Planning and Strategic Housing Services
Dates	Start: 2021 Finish: 2025
Emission Impact	Creation of green technology hubs to reduce emissions
Cost	TBD

## Legal and Demographic Services - Service Plan actions 2023/24

### District-wide actions.

Action Details	DSP6 – Ongoing development of a feasibility study to support the transition of South Derbyshire private taxi hire service to low carbon emission vehicles
Emissions Source	Reduction in transport sector carbon emissions
Owned by	Head of Legal and Demographic Services
Dates	Start: 2022 Finish: 2024
Emission Impact	Tbc
Cost	100 hours