

Appendix 1- Rushcliffe Borough Council Carbon Management Plan 2020

Themes:

1. Property Assets;
2. Fleet and Transport;
3. Contracts and Procurement;
4. Policy and Regulation;
5. Waste and Recycling;
6. Operational Activities;
7. Community and Businesses;
8. Offsetting

Timescale: I = Implemented / ongoing; S = within 1 year; M = between 1 year and 5 years; L = 5 - 10 years

Co-benefits: Cost Saving = £; Energy Saving = ⚡ Economic Benefit = 💰 Health Benefit = 🏠 Equity = 🏘️ resilience to the impacts = 🌿 wildlife = 🦋

CO2 saving = Low (<5%), Medium (5-25%), High (>25%)

A. Internal actions

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
A1. Property Assets							
1.1.	Introduce detailed energy use monitoring of property portfolio (including provision of Energy Performance Certificates)	Property Services	S	Medium - Can provide up to 5 - 20% saving (Carbon Trust)	Staff time only	£	Leading in the public sector

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
1.2.	Continue the roll out of energy efficient plant equipment and lighting across the property portfolio including community buildings and facilities (e.g. Gresham sports park) and car park lighting e.g. LED lighting, power controls, heating systems, explore possible heat pumps including water source at Country Park	Property Services	M	High - e.g. 20 - 40% saving for heat pumps over conventional heating (WebRef1)	(possible for Salix interest free loan) £0.8m one off cost for a 1MW heat pump - but income may be generated from the government's Renewable Heat Incentive (Ashden / FoE) ~£35K for Gresham Sports Park	£	Improving business and industry efficiency
1.3.	Carry out an audit across the existing property portfolio of potential fabric thermal upgrades (insulation), water consumption and all plant, confirming all is optimised in terms of operation and deliver upgrades (including filtration pumps at leisure centres as necessary) and install minor measures where possible (e.g. TRVs) and produce a programme of prioritised works.	Property Services	S	Medium – up to 30% of heating can be lost through poorly insulated buildings (Carbon Trust)	~£1m for installation of measures (possible for Salix interest free loan) (Ashden / FoE)	£ ↓↑	Improving business and industry efficiency
1.4.	Investigate purchasing green energy tariffs (<i>however this is not taken into account in official Green House Gas emission audits – only inhouse generation can be included</i>)	Property Services	S	High - 281 T (grid electricity, if 100% green grid electricity)	Should be little or no cost implications	💰 🚗	Delivering clean, smart, flexible power
1.5.	Undertake a feasibility study of using natural ventilation mechanisms on property portfolio buildings	Property Services	M	TBC	Study - staff time only Installation costs TBC	£ 🚗 ↓↑	Improving business and industry efficiency
1.6.	Deliver upgrade to power supply on the Croquet Lawn in West Bridgford to reduce use of diesel generators at events and markets	Property Services	M	Low - 10 KW generator replaced by grid electricity ≈ 4 Kg CO2 / hour saving (BEIS, 2019)	~£30K	£ 🚗	Delivering clean, smart, flexible power

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
1.7.	Review the portfolio of leisure centres including Bingham, East Leake and Keyworth and consider installation of CHP units where appropriate.	Waste and Contracts	L	High - Up to 30% Leisure Centre emissions (WebRef2) Potentially more if Hydrogen fuelled	~£220k per site for CHP installation (plus removal of old system and retrofit cost). £85k for other low carbon technology (Based on estimate for Bingham Leisure Centre) (possible for Salix interest free loan)	💰	Delivering clean, smart, flexible power
1.8.	Carry out a review of opportunities to reduce the IT carbon footprint by updating ICT plant with lower carbon equipment (including server equipment, printers, workstations etc) and enforcing power saving policies	ICT	S	Low	TBC	£ 💰	Improving business and industry efficiency
1.9.	Review the carbon footprint of e-services and cloud-based services and consider how council service can best be delivered (including e-services, documents transfer and electronic postage and online public services).	ICT	S	Low	TBC	£ 💰	Improving business and industry efficiency
A2. Fleet and Transport							
2.1.	Investigate with partners a programme to replace / upgrade refuse trucks with ULEV / Biogas / Hydrogen fuelled vehicles (including establishing fuel infrastructure)	Waste and Contracts	L	High >70% transport emissions (WebRef3) (e.g. ~30T per vehicle per year for H duel fuel)	£45k per vehicle for duel fuel conversion (not cost of vehicle) plus infrastructure cost and loss of warranty. Or 26T electric refuse £385K vs £185K for diesel – potential saving on running costs	£ 💰 🚚 ⬇️⬆️	Accelerating the shift to low carbon transport

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
2.2.	Investigate and replace / upgrade, all vans with electric powered vehicles (including establishing charging infrastructure) [including R2Go, facilities and dog control van]	Waste and Contracts	M	Medium - 17-30% of van emissions (WebRef4) with grid supplied standard electricity	£25-35k per vehicle plus ~ £1k per chargepoint (Ashden / FoE). Potential saving on running cost	£ 💰 🚚	Accelerating the shift to low carbon transport
2.3.	Integrate driver training with annual certification and investigate 'in cab' monitoring and route optimisation	Waste and Contracts	S	Low - 15% fuel saving (EST)	TBC	£ 💰 🚚	Accelerating the shift to low carbon transport
A3. Contracts and procurement							
3.1.	Leisure operator contractual obligations. - Build energy targets into the new leisure provider contract and monthly energy use monitoring (supporting time controls, use of pool blankets etc.)	Waste and Contracts	S	Low	Potential expense for implementation of monitoring	💰	Improving business and industry efficiency
3.2.	Build into current contract / extension for leisure operator that green energy tariffs must be used at New Bingham LC (<i>however this is not taken into account in official Green House Gas emission audits – only inhouse generation can be included</i>)	Waste and Contracts	S	N/A	May be pass on of cost if green energy is more expensive than contractor's normal supplier	💰 🚚	Delivering clean, smart, flexible power
3.3.	Ground Maintenance operator contractual obligations. - Build travel / fuel emission targets into the Ground Maintenance provider contract and monthly fuel monitoring of Rushcliffe contract (supporting conversion of fleet, plant and tools etc to low carbon)	Waste and Contracts	M	Medium	Potential expense for implementation of monitoring	💰 🚚	Accelerating the shift to low carbon transport
3.4.	Review purchasing / procurement policy to prioritise sustainability – <i>started Jan 2020</i>	Financial Services	S	Not measured	May be increased purchase costs	💰	Leading in the public sector

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
3.5.	For new council portfolio buildings consider 'better than building regs' fabric thermal insulation specification and review works specifications/procurement to avoid high embodied carbon materials or those with high carbon operation or maintenance regimes	Property Services	L	High – up to 30% of heating can be lost through poorly insulated buildings (Carbon Trust)	TBC	💰 ↓↑	Leadership in driving clean growth and housing
A4. Policy and Regulation							
4.1.	Promote carbon reduction policies and guidance to developers working in Rushcliffe and ensure Health Development Checklist used for all appropriate planning applications	Planning and growth	S	Low impact on council emissions but provide potential district savings	Staff time only	💰 🚗 ↓↑	Leadership in driving clean growth and housing
4.2.	Investigate financial incentives for installing energy efficiency measures / low carbon technology in residential, commercial and industrial premises in Rushcliffe	Financial Services	M	Low impact on council emissions but provide potential district savings	Staff time initially then budget for identified incentives	💰 ↓↑	Leadership in driving clean growth and housing
4.3.	Introduce all HIMO's to have conditions on licence for minimum energy efficiency standards (e.g. EPC rating E or better)	Environmental Health	S	Low impact on council emissions but provide potential district savings	Staff time only	🚗 👤 👤	Improving the energy efficiency of our homes
4.4.	Enforcement of minimum energy efficiency standards in the private rented sector (PRS)	Environmental Health	S / M / L	Low impact on council emissions but provide potential district savings	Enforcement costs	🚗 👤 👤	Improving the energy efficiency of our homes
4.5.	Introduce Taxi licensing minimum vehicle emission requirement (e.g. maximum age of vehicle, EURO class, emissions monitoring etc)	Environmental Health	M	Low impact on council emissions but provide potential district savings. Carbon Footprint of conventional Taxis 600 g per passenger km (Ref5)	Enforcement costs	🚗	Accelerating the shift to low carbon transport

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
4.6.	Review Air Quality Strategy to include carbon reduction targets	Environmental Health	S	Low impact on council emissions but provide potential district savings	Staff Time only		Accelerating clean growth
4.7.	Implement an Environmental Ethical Investment Policy	Financial Services	S	Not Measured	May have lower returns		Leading in the public sector
4.8.	Review Service level agreements to include sustainability criteria (including RCAN, RCVS, Professional Sports Club, Notts Wildlife Trust)	Community Development	S	Low impact on council emissions but provide potential district savings	Staff time plus may increase service costs		Leading in the public sector
4.9.	Review and update the standards and conditions document for allotments (including West Bridgford allotments)– sustainability, materials, waste, energy, water supply and capture etc.	Community Development	S	Low impact on council emissions but provide potential district savings	Staff Time only		Enhancing the benefits and value of our natural resources
4.10.	Review and implement the market quality and standards documents to address sustainability, plastic packaging and bags etc	Economic growth	S	Low impact on council emissions but provide potential district savings	Staff Time only		Enhancing the benefits and value of our natural resources
4.11.	Ensure at least minimum energy efficiency standards are achieved in new funded social housing [Investigate non gas grid solutions]	Strategic Housing	S	Low impact on council emissions but provide potential district savings	Staff time only		Improving the energy efficiency of our homes
A5. Waste and Recycling							
5.1.	Prepare for the requirements of the Resources and Waste Strategy for England and Environment Bill on waste and recycling collection and segregation	Waste and Contracts	M	TBC	TBC		Leading in the public sector
A6. Operational activities							
6.1.	Provide strategic and financial leadership to drive ongoing carbon reductions	Senior Management / Cabinet	S / M / L	Not measured	TBC		Leading in the public sector

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
6.2.	Develop and promote Carbon Clever Brand	Performance, Reputation and Democratic Services	S / M / L	Not measured	Staff time only	--	Leading in the public sector
6.3.	Review council publications and see if reduced carbon options are possible (e.g. e-publications)	Performance, Reputation and Democratic Services	S	Low	Staff time only	£	Leading in the public sector
6.4.	Carry out assessment of facilities single plastic use and review options to reduce	Community Development	S	Low	~£500	 à	Leading in the public sector
6.5.	Audit carbon footprint of events / council engagements and review options to reduce	Community Development / Democratic Services	S	Low	£5 – 10K	 	Leading in the public sector
6.6.	Use electronic payments and documentation where possible. Move away from sending cheques and look to make payments electronically. Switch over to e-billing for companies that we still receive paper invoices from (where available). Increase use of email for remittances / invoices / reminders etc.	Financial Services	S	Low	TBC		Leading in the public sector
6.7.	Establish a Climate Change Action Reserve fund (facilitating other actions in this plan)	Financial Services	S	High	£1m		Leading in the public sector
A7. Community and Businesses							
7.1.	Actions included within Section B Influencing						
A8. Offsetting							
8.1.	Undertake a feasibility study of opportunities to fit PV / alternative energy generation and storage to property portfolio (including land, buildings and in car parks) – See also B8.1	Property Services	M	TBC	Bingham LC PV 200 sq. m = £60k	£ 	Delivering clean, smart, flexible power
8.2.	Audit council leisure centres with a view to preparing a business case for putting PV on all roofs	Property Services	M	TBC	Bingham LC PV 200 sq. m = £60k	£ 	Delivering clean, smart, flexible power

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
8.3.	Consider investing in alternative energy production off estate (e.g. hydroelectric facility, PV farms, wind turbines)	Property Services	M	TBC	TBC	£ 💰	Delivering clean, smart, flexible power
8.4.	Investigate set up a Carbon Offset Fund through Section 106 agreements / CIL. Will generate funds for investment in low carbon projects. (NB the Government's proposed Future Homes Standard may prohibit this?).	Planning and Growth	M	TBC	TBC	£ 💰	Accelerating clean growth
8.5.	Develop a tree planting plan on council portfolio e.g.; Rushcliffe Country Park, Collington Common, Bridge Field, Edwalton Golf Course, Gamston open space, The Hook, Gresham (next to tram line), Bridge Field (next to houses), Boundary Road, Meadow Park - East Leake, Miss Machin's Field and Land off Landmere Ln (need to be aware of existing ecological value)	Community Development / Property Services	S	High - (Rewilding Britain)	Variable up £3k per street tree, including tree pit) (Ashden / FoE), a hectare of 2,250 trees costing ~£3000 (may also require further land purchase at ~£25k / ha)	🚲 à	Enhancing the benefits and value of our natural resources
8.6.	Establish RBC's own tree nursery (so native trees can be grown from seeds (gathered e.g. by RBC staff / tree wardens), using compost from green waste facility, sell/give surplus to other LA's)	Community Development	M	Low	Low cost	£ 🚲 🌳 🌳 à	Enhancing the benefits and value of our natural resources

Ref.	Action	Lead Specialist	Timescale	Estimated Potential CO2e Saving	Estimated Financial Cost	Co-benefits	Link to D2N2 Energy Strategy
8.7.	Replace wind turbines at Rushcliffe Country Park if cost effective to do so	Community Development	M	Medium	(possible for Salix interest free loan) Purchase and installation ranges from £2000 for small 2KW turbine too £1m for 800KW turbine and upwards. Alternative funding arrangements may be possible e.g. land rent to wind power company or power purchase agreements	£ 💰	Delivering clean, smart, flexible power

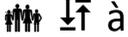
B. Influencing Actions

Ref.	Action	Lead Specialist	Timescale	Potential CO2e Saving	Financial Cost (in addition to officer time)	Co-benefits	Link to D2N2 Energy Strategy
B1. Property Assets							
1.1.	Provide free to use cold-water dispenser in all public areas of property portfolio (including Leisure Centres)	Property Services	M	Low impact on council emissions but provide potential district savings	TBC		Leading in the public sector
1.2.	Consider business case to purchase empty properties, retrofit and resell in line with empty homes policy	Environmental Health	M	Low impact on council emissions but provide potential district savings	TBC, potential to sell at profit		Leadership in driving clean growth and housing

Ref.	Action	Lead Specialist	Timescale	Potential CO2e Saving	Financial Cost (in addition to officer time)	Co-benefits	Link to D2N2 Energy Strategy
B2. Fleet and Transport							
2.1.	Develop a staff travel promotion / incentive scheme for alternative travel (ULEV car lease scheme, car passenger allowance, cycle allowance, cycle purchase scheme, staff business travel card, Staff travel schemes etc).	Financial services	S	Low	TBC	 	Accelerating the shift to low carbon transport
2.2.	Consider a staff alternative travel reward competition	Human Resources	S	Low	TBC		Accelerating the shift to low carbon transport
2.3.	Widen access to the Staff Cycle purchase scheme	Financial Services	S	Low	TBC	 	Accelerating the shift to low carbon transport
2.4.	Extending provision of EV charging points on the Rushcliffe estate e.g. in borough car parks.	Property Services	M	Low impact on council emissions but provide potential district savings	£2.5k per public chargepoint after government grants (Ashden / FoE)	 	Accelerating the shift to low carbon transport
2.5.	Develop a strategy for further EV charging points across the borough	Economic Development	M	Low impact on council emissions but provide potential district savings	£2.5k per public chargepoint after government grants (Ashden / FoE)	 	Accelerating the shift to low carbon transport
2.6.	Promote active travel to the public (e.g. school travel plans including accreditation (stars) and walking bus; travel choice programme including active travel; well-being at work scheme / work place health; Business e-bike scheme; healthy futures fund – cycling on prescription; Community cycling groups; Ridewise training)	Community Development (Working with NCC and public health)	M	Low impact on council emissions but provide potential district savings	Staff Time e.g. require office developments to have secure cycle parking; education/training programmes; to e segregated cycle lanes. (Ashden / FoE)	 	Accelerating the shift to low carbon transport

Ref.	Action	Lead Specialist	Timescale	Potential CO2e Saving	Financial Cost (in addition to officer time)	Co-benefits	Link to D2N2 Energy Strategy
B3. Contracts and procurement							
3.1.	Investigate joint procurement of low carbon technology for Social Housing providers and councils	Strategic housing	M	Low impact on council emissions but provide potential district savings	Staff time only	💰 👤👤👤	Leading in the public sector
B4. Policy and Regulation							
4.1.	Working collectively to support the delivery of the D2N2 Energy Strategy and develop and deliver tangible energy action plans and area wide carbon reduction	EMT	M	TBC	Staff time only	💰 👤👤👤	Leading in the public sector
4.2.	Call on the Government to provide the necessary powers and resources to deliver local action on climate change	Senior Management / Cabinet	M	TBC	Staff time only	👤👤👤	Leading in the public sector
4.3.	Support the development of a masterplan for the Ratcliffe on Soar site which maximises the assets on the site including the grid connection which lends itself to the site being a test bed for next generation energy production	Economic Development / planning policy	L	Low impact on council emissions but provide potential district savings	Staff time only	💰 ↓↑	Leadership in driving clean growth and housing
4.4.	Develop Supplementary Planning Documents e.g. for Energy Efficiency and low carbon developments; Renewable Energy; Climate Adaptation; Green Infrastructure [including natural carbon solutions (e.g. / Trees / Wetlands Meadows / Hedgerows) plus provision of allotments; green walls and roofs; Flooding avoidance measures in new developments (including SUD's and Natural flood management (NFM)]; Travel Plans and associated works (encouraging modal shift and active travel, provision of EV charging points (inc. ebikes), car club parking bays, cycle routes and connectivity investment)	Planning Policy	M	Low impact on council emissions but provide potential district savings	Staff time only	💰 👤👤👤 ↓↑ à	Leadership in driving clean growth and housing

Ref.	Action	Lead Specialist	Timescale	Potential CO2e Saving	Financial Cost (in addition to officer time)	Co-benefits	Link to D2N2 Energy Strategy
4.5.	Investigate requiring new developments to provide a 'carbon score' showing the carbon footprint of each property and its likely running cost / Carbon checklist	Planning Policy	M	Low impact on council emissions but provide potential district savings	Staff time only	💰 👤 ↓↑	Leadership in driving clean growth and housing
4.6.	Develop climate adaptation plans for Rushcliffe	Community Development	M	Low impact on council emissions but provides solution to impacts	TBC	👤 ↓↑	--
B5. Waste and Recycling							
5.1.	Actions being explored			TBC	TBC		
B6. Operational activities							
6.1.	Actions included in Section A – Internal Actions			--	--		-
B7. Community and Businesses							
7.1.	Promotion of green business issues including energy efficiency, transport / travel planning, low carbon technology, 'green' accreditation and signposting to grants and support services etc.	Economic Development /Community Development	M	Low impact on council emissions but provide potential district savings	TBC	💰 👤 ↓↑	Improving business and industry efficiency
7.2.	Hold a Notts wide clean growth event for local businesses	Economic Development	S	Low impact on council emissions but provide potential district savings	TBC	💰 👤 ↓↑	Improving business and industry efficiency
7.3.	Promote local / sustainable food / food growing (Allotments, Diet for the world, Incredible Edible, Rushcliffe Roots, Abundance Projects, links to local fruit and veg businesses)	Community Development	M	Low impact on council emissions but provide potential district savings	TBC	🚗 👤 ↓↑	Enhancing the benefits and value of our natural resources
7.4.	Promote use of green spaces through social prescribing (including green gym, health walks, forest school etc)	Community Development	M	Low impact on council emissions but provide potential district savings	TBC	🚗 👤 ↓↑	Enhancing the benefits and value of our natural resources

Ref.	Action	Lead Specialist	Timescale	Potential CO2e Saving	Financial Cost (in addition to officer time)	Co-benefits	Link to D2N2 Energy Strategy
7.5.	Promote sustainable management of sports clubs / grounds (best practice case studies, grants etc)	Community Development	M	Low impact on council emissions but provide potential district savings	TBC		Leading in the public sector
7.6.	Run a climate promotion (internal, parish council, businesses and public) (possible use Green Office Week also - Carbon reduction team could support)	Performance, Reputation and Democratic Services	M	Low impact on council emissions but provide potential district savings	Staff time only		Leading in the public sector
7.7.	Identify and work with key influencers within Rushcliffe on Carbon Management best practice	EMT / Cabinet	S/ML	Low impact on council emissions but provide potential district savings	Staff Time only		
B8. Offsetting							
8.1.	Consider establishing a community energy scheme (a community owned energy generating company e.g. community solar farm)	Community development	M	Low impact on council emissions but provide potential district savings	TBC		Leading in the public sector
8.2.	Investigate Natural Climate Solutions for Rushcliffe, in line with Rushcliffe Nature Conservation Strategy, in partnership with land owners / managers	Community Development	L	Low impact on council emissions but provide potential district savings	Requires land, from donors, developers or purchase and ongoing management funds		Enhancing the benefits and value of our natural resources

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