

Appendix 3 Carbon Impact Assessment

Will the decision/proposal impact...	Impact	If an impact or potential impacts are identified			
		Describe impacts or potential impacts on emissions from the Council and its contractors.	Describe impact or potential impacts on emissions across Rotherham as a whole.	Describe any measures to mitigate emission impacts	Outline any monitoring of emission impacts that will be carried out
Emissions from non-domestic buildings?	Reduces emissions	PV output will directly reduce carbon emissions within operational estate by up to 40 Tonnes CO2 PA over 40 year lifespan.	Reduction	-	Output will be monitored and recorded.
Emissions from transport?	Reduces emissions	Project will encourage and enable conversion to EV. Saving 202 Tonnes CO2 (year 1 estimate). Some increased carbon emissions during construction phase.	Reduction	Transport will be minimised during construction phase.	Amount of EV Charging will be monitored and recorded. Contractors will be required to report project emissions.
Emissions from waste, or the quantity of waste itself?	No impact	-	-	-	-
Emissions from housing and domestic buildings?	No impact	-	-	-	-

Emissions from construction and/or development?	Impact unknown	There will be minimal impact during the installation phase.	Minimal	Contractors will reduce emissions and environmental impact where possible.	Liaison with Council officers will include monitoring of activities to ensure minimal impact.
Carbon capture (e.g. through trees)?	Nil	-	-	-	-

Identify any emission impacts associated with this decision that have not been covered by the above fields:
Encouraging and enabling transition to Electric Vehicles (EV) will also reduce NOx emissions.

Please provide a summary of all impacts and mitigation/monitoring measures:

Conversion of fossil fuelled transport to EV has a direct impact on local CO2 emissions and is even greater when on-site generation from PV is available.

Output from PV will be measured and recorded, along with how it is utilised both for EV Charging and in the Council operational estate.

Electricity used for EV Charging will be measured and reported using the Charge Point Management System (CPMS).

In each case established conversion factors will be applied for carbon reporting purposes.

Supporting information:

Completed by:
(Name, title, and service area/directorate).

Andy Wilson, Energy Efficiency Officer, Asset Management Service, Regeneration and Environment

Please outline any research, data, or information used to complete this [form].

Experience of delivering and managing existing solar PV installations, EV ChargePoint installations, and combined EV / PV installations within the existing operational estate.

<p>If quantities of emissions are relevant to and have been used in this form, please identify which conversion factors have been used to quantify impacts.</p>	<p>Average of 207,662kWh solar PV generated PA over 40-year lifespan saving 40 Tonnes of Carbon per year.</p> <p>Greenhouse gas reporting: conversion factors 2022 - GOV.UK (www.gov.uk)</p> <table border="1" data-bbox="938 209 2107 296"> <thead> <tr> <th>Activity</th> <th>Country</th> <th>Unit</th> <th>Year</th> <th>Total kg CO₂e per unit</th> </tr> </thead> <tbody> <tr> <td>Electricity generated</td> <td>Electricity: UK</td> <td>kWh</td> <td>2022</td> <td>0.19338</td> </tr> </tbody> </table> <p>CO2 Savings through conversion to EV calculated as follows: * Assumes fuel mix 50% petrol, 50% diesel *Usage 1kWh = 5km (3.1miles) *Average CO2 emission diesel: 160g/km *Average CO2 emission petrol: 173g/Km Source: Shell Recharge</p>	Activity	Country	Unit	Year	Total kg CO ₂ e per unit	Electricity generated	Electricity: UK	kWh	2022	0.19338
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<p>Tracking [to be completed by Policy Support / Climate Champions]</p>											