

User guidance:

- The first section of this form guides users through considering major areas where emissions are likely to occur. If emissions are impacted in a way not covered by these categories, please identify this at the bottom of the section
- The first section should be filled as such:
 - **Impact:** identify, in relation to each area, whether the decision of the proposal does the following: *reduces emissions, increases emissions, or has no impact on emissions*. If it is uncertain this section can be labelled *impact unknown*
 - If **no impact on emissions** is identified: no further detail is needed for this area, but can be added if relevant (e.g. if efforts have been made to mitigate emissions in this area.)
 - **Describe impacts or potential impacts on emissions:** two sections deal respectively with emissions from the Council (including those of contractors), and emissions across Rotherham as a whole. In both sections please explain any factors that are likely to reduce or increase emissions. If **impact unknown** has been selected, then identify the area of uncertainty and outline known variables that may affect impacts.
 - In most cases there is no need to quantify the emission impact of an area after outlining the factors that may reduce or increase emissions. In some cases, however, this may be desirable if factors can be reduced to a small number of known variables (e.g. if an emission impact is attached to a known or estimated quantity of fuel consumed).
 - **Describe any measures to mitigate emission impact:** regardless of the emission impact, in many cases steps should be taken in order to reduce mitigate all emissions associated with each area as far as possible; these steps can be outlined here (For example: if a proposal is likely to increase emissions but practices or materials have been adopted in order to reduce this overall impact, this would be described here).
 - **Outline any monitoring of emission impacts that will be carried out:** in this section outline any steps taken to monitor emission levels, or steps taken to monitor the factors that are expected to increase or reduce emission levels (for example, if waste or transport levels are being monitored this would be described here)
- A **summary paragraph** outlining the likely overall impacts of the proposal/decision on emissions should then be completed - this is not required if the proposal/decision has no impact across all areas.
- The supporting information section should be filled as followed:
 - Author/completing officer
 - **Research, data, or information** may refer to datasets, background documents, literature, consultations, or other data-gathering exercise. These should also be added to the **supporting documents** section of the cabinet report

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- Carbon Impact Assessments are to be appended to the associated cabinet reports
 - Prior to publishing reports, Carbon Impact Assessments should be sent to climate@rotherham.gov.uk for feedback
 - Report authors may also use the above email address to direct any further queries or to access further support regarding completing the 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?	No impact				
Emissions from transport?	Impact unknown	Additional emissions associated with travel related to the development and construction of the projects can be expected.	<p>Traffic calming measures have complex and conflicting impacts – per vehicle emissions tend to increase but impacts on traffic volume and routing typically offset these. These factors, combined with low levels of traffic in the streets to be treated, and the short length of streets impacted, mean the impact on emissions is uncertain but likely to be small.</p> <p>Measure to improve pedestrian infrastructure and deter footway parking can be expected to facilitate walking. Where this displaces travel by motorised means, a carbon saving can be expected. These will likely be very small, as only short distance trips are likely to be impacted in this manner.</p>	None.	Given small impacts and infeasibility of monitoring carbon emissions arising from small scale traffic interventions, no monitoring is proposed.

			<p>Measures to improve provisions for pedestrians may be expected to reduce emissions where these effect a modal shift from car to walking. However, the carbon saving is likely to be very small, given that the contribution of car trips of walking distance to overall emissions is small (i.e., only 9% of territorial car emissions in Rotherham relate to trips shorter than 5 km / 3 miles).</p>		
Emissions from waste, or the quantity of waste itself?	Increase emissions	Most schemes result in excavations and/or disposal of materials as part of construction, with consequential one-off increase in waste and associated emissions.	No impact expected.	Scheme PMs will be expected to work with designers and contractors to ensure carbon emissions minimised as far as practicable, including actively seeking opportunities to cut emissions from existing operation.	
Emissions from housing and domestic buildings?	No impact				
Emissions from construction and/or development?	Increase emissions	All highway schemes have construction emissions arising from the supply, installation, maintenance and operation of the schemes.	No impact expected beyond the contribution from RMBC and its contractors.	Scheme PMs will be expected to work with designers and contractors to ensure carbon emissions are minimised as far as practicable, including actively seeking opportunities to cut	The Climate Change Team is investigating opportunities to monitor highways schemes' embodied carbon impact e.g., by applying conversion factors

		High friction surfacing and thermoplastic road markings such as those indicated in Appendices 1 and 2 have a significant 'embodied' carbon intensity: 5.7 tCO ₂ e per tonne of material, compared with e.g., 0.055 tCO ₂ e per tonne of asphalt.		emissions from existing operation. This might involve using as little material as possible (e.g., thermoplastic road markings, asphalt) consistent with statutory road safety standards and effective delivery of the scheme.	from National Highways' carbon tool to case studies of one or more projects under the Council's Transport Capital Programme.
Carbon capture (e.g., through trees)?	None				

Identify any emission impacts associated with this decision that have not been covered by the above fields:

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

In summary, the following impacts are expected:

- A discrete increase in emissions associated with development and construction of the scheme.
- A potential, continuing change in emissions from transport, due to changes in the pedestrian environment.

The increases associated development, construction, maintenance and operation reflect the systemic nature of the carbon emissions problem; whilst the energy and construction systems are emitters of carbon, any additional activity utilising these systems can be expected to result in increases in emissions. Some changes in emissions from traffic can be expected due to the proposals. However, the balance of these changes is complex and impracticable to quantify, except to note that any change is expected to be very small on account of impacting low volumes of traffic over short distances.

As such, any carbon impact is likely to be small in the context of overall transport emissions in Rotherham, NZ30 and NZ40 targets and remaining carbon budgets.

Supporting information:	
Completed by: (Name, title, and service area/directorate).	Nat Porter Interim Group Lead, Transport Planning Policy and Programmes Transportation Infrastructure Service Regeneration & Environment
Please outline any research, data, or information used to complete this [form].	<ul style="list-style-type: none">• Local Transport Note 1/07 - Traffic Calming• SCRTM1 emissions analysis (SYSTRA, 2022)• National Highways' carbon tool
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.	As quoted above.
Tracking [to be completed by Policy Support / Climate Champions]	Tracking reference: CIA 226 Arthur King Principal Climate Change Officer Strategic Asset Management Finance & Customer Services